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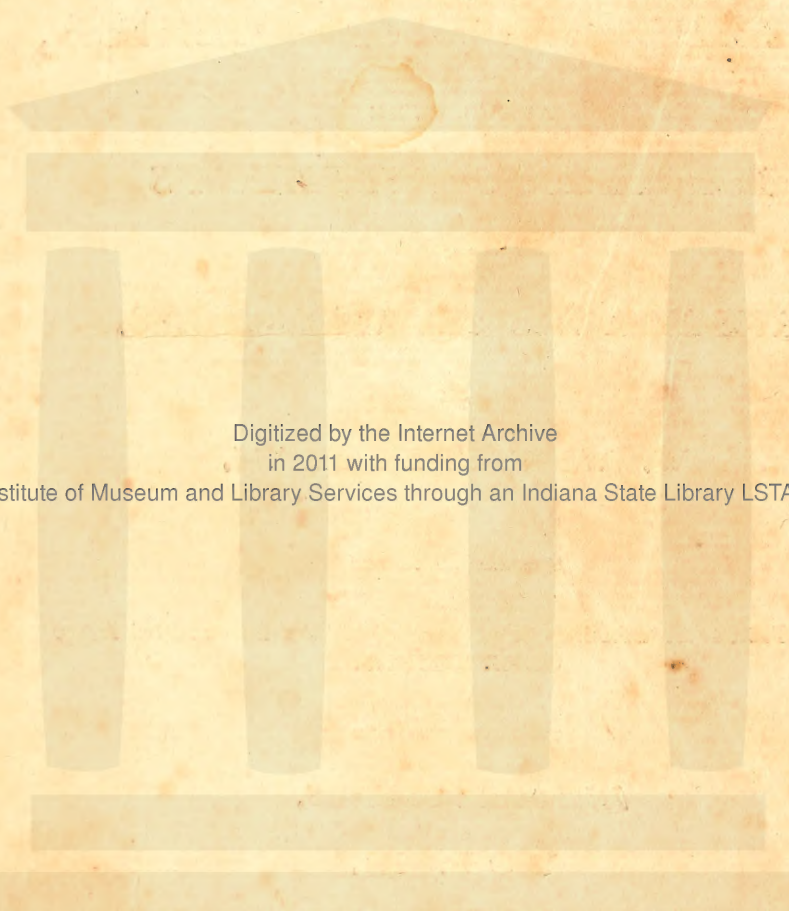
AN
HISTORICAL,
GEOGRAPHICAL, COMMERCIAL,
AND
PHILOSOPHICAL
VIEW
OF THE
UNITED STATES OF AMERICA,
AND OF THE
EUROPEAN SETTLEMENTS
IN
AMERICA AND THE WEST-INDIES.
BY
W. WINTERBOTHAM.

THE FIRST AMERICAN EDITION, WITH ADDITIONS AND
CORRECTIONS.

IN FOUR VOLUMES.

V O L. III.

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PRESENT SITUATION
OF THE
UNITED STATES OF AMERICA.

SOUTHERN STATES.

THIS third, which is much the largest division of the United States, comprehends

MARYLAND, VIRGINIA, KENTUCKY,
NORTH-CAROLINA, TERRITORY S. of the OHIO,
SOUTH-CAROLINA, and GEORGIA.

This extensive division is bounded on the north by Pennsylvania and the Ohio river; on the west by the Mississippi; on the south by East and West Florida; and on the east by the Atlantic ocean and the Delaware State. It is intersected in a N. E. and S. W. direction by the range of Allegany mountains, which give rise to many noble rivers, which fall either into the Atlantic on the east; or the Mississippi on the west. From the sea coast, sixty, eighty, and in some parts an hundred miles back towards the mountains, the country, generally speaking, is nearly a dead level, and a very large proportion of it is covered, in its natural state, with pitch pines. In the neighbourhood of stagnant waters, which abound in this level country, the inhabitants are sickly, but in the back, hilly and mountainous country, they are as healthy as in any part of America.

This district of the Union contains about two millions of inhabitants, of whom about six hundred and forty-eight thousand are slaves. The influence of slavery has produced a very distinguishing feature in the general character of the inhabitants, which, though now discernible to their disadvantage, has been softened and meliorated by the benign effects of the revolution, and the progress of liberty and humanity,

HISTORY OF ITS SETTLEMENT, &c.

M A R Y L A N D.

This State was granted by a patent of King Charles the First, June 30, 1632, to George Calvert, Baron of Baltimore, in Ireland,* who had been obliged, on account of the French government, to abandon the province of Avalon, in Newfoundland, after having expended twenty-five thousand pounds in its advancement.

The government of this province was by charter vested in the proprietary; but it appears, that he either never exercised these powers alone, or but for a short time; for we find, in 1637, that the freemen rejected a body of laws drawn up in England, and transmitted by his lordship, in order to be passed for the government of the province. In the place of these they proposed forty-two bills to be enacted into laws, by the consent of the proprietary: these were, however, never enacted, at least they are not on record.

The first emigration to Maryland consisted of two hundred gentlemen of considerable fortune and rank, with their adherents, chiefly Roman Catholics, who hoped to enjoy liberty of conscience under a proprietary of their own profession. They sailed from England in November, 1632, and landed in Maryland the beginning of 1633. The Honourable Leonard Calvert, brother to Lord Baltimore, who was the first governor, very wisely and justly purchased, by presents of various goods, the rights of the Indians, and with their free consent took possession of their town, which he called St. Mary's. The country was settled with so much ease, and furnished with so many conveniencies, that emigrants repaired thither in such numbers, that the colony soon became populous and flourishing.

In 1638 a law was passed, constituting the first regular House of Assembly, which was to consist of such representatives, cal-

* A Copy of this patent may be seen by referring to Hazard's Historical Collections, page 327.

led burgesses, as should be elected pursuant to writs issued by the governor. These burgesses possessed *all the powers of the persons electing them*; BUT ANY OTHER FREEMEN, WHO DID NOT ASSENT TO THE ELECTION, MIGHT TAKE THEIR SEATS IN PERSON. Twelve burgesses or freemen, with the lieutenant-general and secretary, constituted the Assembly or Legislature. This Assembly sat at St. Mary's.

Slavery seems to have gained an early establishment in Maryland, for an act of this Assembly describes "the people" to consist of all Christian inhabitants, "slaves only accepted." The persecuting laws which were passed by the Virginians, soon after this period, against the Puritans, made the latter emigrate in considerable numbers to Maryland, that they might enjoy, under a Popish proprietary, that liberty of conscience of which they were deprived by their fellow Protestants.

In 1642 it was enacted, that ten members of the Assembly, of whom the governor and six burgesses were to be seven, should be a House; and if sickness should prevent that number from attending, the members present should make a House.

In 1644 one Ingle excited a rebellion, forced the governor to fly to Virginia for aid and protection, and seized the records and the great seal; the last of which, with most of the records of the province, were lost or destroyed. From this period to the year 1647, when order was restored, the proceedings of the province are involved in almost impenetrable obscurity.

In July, 1646, the House of Assembly, or more properly the burgesses, requested that they might be separated into two branches—the burgesses by themselves, with a negative upon bills. This was not granted by the lieutenant-general at that time; but in 1650, an act was passed dividing the Assembly into two Houses; the governor, secretary, and any one or more of the council, formed the Upper House; the delegates from the several hundreds, who now represented the freemen, formed the Lower House. At this time there were in the province but two counties, St. Mary's and the Isle of Kent, but another (*Ann Arundel*) was added the same session. This was during the administration of Governor Stone.

In this year there was also passed "an act against raising money without the consent of the Assembly." It enacted, "*That no taxes shall be assessed or levied on the freemen of the province without their own consent, or that of their deputies, first declared in a General Assembly.*" The printed words and early date of

this Maryland act are worthy of particular notice. The acts of the General Assembly and governor were of the same force in their own province as acts of parliament in England, and could not be repealed without the concurring assent of the proprietary or his deputy, with the other two estates.

In 1654, during Cromwell's usurpation in England, an act was passed restraining the exercise of the Roman Catholic religion. This must have been procured by the mere terror of Cromwell's power, for the first and principle inhabitants were Catholics. Indeed the power of Cromwell was not established in Maryland without force and bloodshed. His friends and foes came to an open rupture, an engagement ensued, Governor Stone was taken prisoner, and condemned to be shot; this sentence, however, was not executed, but he was kept a long time in confinement.

In March, 1658, Josiah Fendall, Esq. was appointed lieutenant-general of Maryland by commission from Oliver Cromwell; he dissolved the Upper House, and surrendered the powers of government into the hands of the delegates.

Upon the restoration in 1660, the Honourable Philip Calvert, Esq. was appointed governor; the old form of government was revived; Fendall, and one Gerrard, a councillor, were indicted, found guilty and condemned to banishment, with the loss of their estates; but, upon petition, they were pardoned.

In 1689, the government was taken out of the hands of Lord Baltimore by the grand convention of England; and in 1692, Mr. Copley was appointed governor by commission from William and Mary.

In 1692, the Protestant religion was *established by law*.

In 1699, under the administration of Governor Blackiston, it was enacted, that Annapolis should be the seat of government.

In 1716, the government of this province was restored to the proprietary, and continued in his hands till the late revolution, when, though a minor, his property in the lands was confiscated, and the government assumed by the freemen of the province, who formed the constitution now existing. At the close of the war, Henry Harford, Esq. the natural son and heir of Lord Baltimore, petitioned the legislature of Maryland for his estate, but his petition was not granted. Mr. Harford estimated his loss of quit-rents, valued at twenty-five years purchase, and including arrears, at two hundred and fifty-nine thousand, four hundred and eighty-eight pounds, five shillings,

dollars at 7/6—and the value of his manors and reserved lands at three hundred and twenty-seven thousand, four hundred and forty-one pounds of the same money.

VIRGINIA.

WE have already, when treating of the discovery of North-America, given a brief history of the settlement of this State to the year 1610,* when Lord Delaware arrived with supplies for the colony of settlers, and provisions. His presence had a happy effect on the colony, order and confidence being soon restored by him. The state of his health did not, however, permit him long to pursue his plans of improvement, for in the beginning of 1611 he was obliged to return to England, leaving about two hundred colonists, possessed of health, plenty and peace with their neighbours. After his departure the colony again declined; but his successor, Sir Thomas Dale, arriving in May with more emigrants, cattle and provision for a year, things were again restored to order. This same year the adventurers obtained a new charter, by which the two former were confirmed, and they had also granted to them all the islands situated in the ocean, within three hundred leagues of any part of the Virginia coast. The corporation was now considerably new-modelled, and, in order to promote the effectual settlement of the plantation, licence was given to open lotteries in any part of England. The lotteries alone, which were the first ever granted in England, brought twenty-nine thousand pounds into the company's treasury. At length, being considered as a national evil, they attracted the notice of Parliament, were presented by the commons as a grievance, and in March, 1620, suspended by an order of Council.

In April, 1613, Mr. John Rolfe, a worthy young gentleman, was married to Pocahontas, the daughter of Powhatan, the famous Indian chief. This connection, which was very agreeable both to the English and Indians, was the foundation of a friendly and advantageous commerce between them.

Three years afterwards Mr. Rolfe, with his wife Pocahontas visited England, where she was treated with that attention and respect which she had merited by her important services to the colony in Virginia. She died the year following at Gravesend, in the twenty-second year of her age, just as she was about to

* See vol. 1. page 162 to 165.

embark for America. She had embraced the Christian religion, and in her life and death evidenced the sincerity of her profession. She left a son, who, having received his education in England, went over to Virginia, where he lived and died in affluence and honour, leaving behind him an only daughter. Her descendants are among the most respectable families in Virginia.

Tomocomo, a sensible Indian, brother-in-law to Pocahontas, accompanied her to Englnd, and was directed by Powhatan to bring him an exact account of the numbers and strength of the English. For this purpose, when he arrived at Plymouth, he took a long stick, intending to cut a notch in it for every person he should see: this he soon found impracticable, and threw away his stick. On his return, being asked by Powhatan, how many people there were, he is said to have replied, "Count the stars in the sky, the leaves on the trees, and the sands on the sea shore; for such is the number of the people of England."

In 1612-13, Sir Thomas Gates was dispatched with six large ships, carrying three hundred colonists, one hundred cattle and useful supplies. He arrived in August, and parties were sent out from James-town to form distant settlements. He returned the beginning of 1614, and the administration devolved once more on Sir Thomas Dale, to whom the Virginians owe the introduction of landed property. In 1615, fifty acres of land were granted to every emigrant and his heirs, and the same quantity to every person imported by others. Dale sailed for England in the beginning of 1616, giving up the trust to Sir George Yeardly, as deputy-governor, and in this year the cultivation of tobacco was introduced. Mr. Argal, a new deputy-governor, was sent out, who arrived in May 1617. He published a variety of edicts, and was guilty of those wrongs and oppressions, that the treasurer and council appointed Yeardly captain-general, and empowered him to examine into and redress grievances. Sir George arrived in April, 1619, with several instructions favourable to freedom, and soon declared his intention of calling a General Assembly, which gave the greatest joy to men who had been hitherto subjected to the arbitrary orders of their prince, to the interested ordinances of an English corporation, or to the edicts of a haughty governor, and who enjoyed none of those liberties which Englishmen claim as their birthright.

In June, Yeardley, pursuant to his instructions from the company, issued writs for the election of delegates, called

burgesses. The colony had been divided into seven hundreds or distinct settlements, which seemed to enjoy some of the privileges of boroughs, and from this circumstance the democratic branch of the Assembly has been called to this day, the House of Burgesses, though composed almost entirely of the representatives of counties. The Assembly, formed of the governor and council of state, who were appointed by the treasurer and company, and of the burgesses chosen by the people, met together in one apartment, and transacted affairs like the parliament of Scotland of old, which mode continued till after the restoration of Charles II. Thus convened, and thus composed, the legislature "debated all matters thought expedient for the good of the whole." The laws were transmitted to England for the approbation of the treasurer and company, without whose confirmation they were of no validity. The introduction of an Assembly was attended with the happiest effects. The emigrants, for the first time, resolved to settle themselves, and to perpetuate the plantation. The Assembly thanked the company for their favour, and begged them "to reduce into a compenduous form, with his Majesty's approbation, the laws of England proper for Virginia, with suitable additions;" giving as a reason, "that it was not fit that his subjects should be governed by any other rules than such as received their influence from him." This year the treasurer and council received a letter from government, "commanding them to send a hundred disolute persons (convicts) to Virginia." They were accordingly transported, "and were at that period, very acceptable to the colonists." The subsequent year, 1620, must, on account of the introduction of African slaves into the colonies, be stigmatised as a much viler æra. The Hollanders were not then precluded by any law from trading with the colonies. A Dutch vessel carried to Virginia a cargo of Negroes, and the Virginians, who had themselves just emerged from a state of slavery, became chargeable with reducing their fellow men to the condition of brutes.

In July, the treasurer and company carried into execution a resolution formerly taken, for establishing a proper constitution for the colony. The ordinance they passed, declared, that there should be two supreme councils in Virginia, the one to be called the council of state, to be appointed and displaced by the treasurer and company, and which was to advise the governor in governmental affairs; the other was to be denominated the General Assembly, and to consist of the governor and

council, and of two burgesſes, to be choſen for the preſent, by the inhabitants of every town, hundred and ſettlement in the colony. The Aſſembly was to determine by the majority of the voices then preſent, and to enact general laws for the colony, reſerving to the governor a negative voice. They were to imitate the laws and cuſtoms, and judicial proceedings uſed in England. "No acts were to be in force till confirmed by the General Court in England: on the other hand, no order of the General Court was to bind the colony till aſſented to by the Aſſembly." The company having offered territory to thoſe who ſhould either emigrate themſelves, or engage to tranſport people to the colony, found this policy ſo ſucceſſful, that upwards of three thouſand five hundred perſons emigrated to Virginia during this and the two preceding years.

This year, 1622, was remarkable for a maſſacre of the coloniſts by the Indians, which was executed with the utmoſt ſubtilty, and without any regard to age or ſex. A well-concerted attack on all the ſettlements, deſtroyed, in one hour and almoſt at the ſame inſtant, three hundred and forty-ſeven perſons, who were defenceleſs and incapable of making reſiſtance. The emigrants, notwithstanding the orders they had received, had never been ſolicitous to cultivate the good-will of the natives, and had neither aſked permission when they occupied their country, nor given a price for their valuable property, which was violently taken away. The miſeries of famine were ſoon ſuperadded to the horrors of maſſacre. Of eighty plantations, which were filling apace, only eight remained; and of the numbers which had been tranſported thither, no more than about one thouſand eight hundred ſurvived thoſe manifold diſaſters.

Frequent complaints having been made to King James of the oppreſſions of the treaſury and company, and the before-mentioned calamities being attributed to their miſconduct or neglect, it was determined, that a commiſſion ſhould iſſue to inquire into the affairs of Virginia and the ſomer iſles, from the earlieſt ſettlement of each. Upon the report of the commiſſioners, the King concluded on giving a new charter, and required of the company the ſurrender of former grants, which being reſuſed, a writ of *quo warranto* iſſued in November, 1623, againſt the patents of the corporation: and judgment was given by the Court of King's Bench againſt the treaſurer and company, in Trinity term, 1624. Theſe proceedings "were ſo conformable to the general ſtrain of the arbitrary adminiſtration of that reign,

that they made little impression at the time, though the Virginia company was composed of persons of the first quality, wealth and consequence in the nation." The company, probably, would not have exercised so tame and submissive a spirit, had they not been wholly disappointed in their visionary prospects, and met with considerable losses, instead of acquiring enormous profits. They had obtained from individuals, who sported in their lotteries from the hope of sudden riches, twenty-nine thousand pounds: but the transportation of more than nine thousand English subjects had cost them one hundred and fifty thousand pounds. They did not, however, abandon the colony in its distress while they continued a corporation. Timely supplies were sent from England to the Virginia settlers, which so animated them, that they carried on an offensive war against the Indians, pursued them into their fastnesses, and drove them from the neighbourhood of those rivers, where they had fixed their own plantations.

As to King James, he "assuredly considered the colonies as acquired by conquest; and that they ought to be holden of his person, independent of his crown or political capacity; and might be ruled according to his good will, by prerogative: and he endeavoured, agreeably to the strange economy of his reign, to convert them into a mere private estate, descendible to his personal heirs."*

The Virginia company being dissolved, James took the colony under his immediate dependence, which occasioned much confusion. Upon his death, in 1625, King Charles, being of the same judgment with his farther as to the government of Virginia, determined to tread in the same steps. In May he named a new governor and council for Virginia, and invested them with an authority fully legislative and arbitrary. They were empowered to make and execute laws, to impose taxes, and enforce payment. Neither the commission nor instructions mentioned expressly, or even alluded to an Assembly, to the laws of England, or to the acts of the provincial legislature, as a rule of government. They were required to transport colonists into England, to be punished there for crimes committed in Virginia. This system increased the colonial dissatisfaction, which continued for years, till the Virginians received a letter containing the royal assurance, that "all their estates, trade, freedom

* See Chalmers's Political Annals under the head of Virginia, for many of the preceding and subsequent articles respecting that colony.

and privileges, should be enjoyed by them in as extensive a manner, as they enjoyed them before the recalling of the company's patent." On this they were reconciled, and began again to exert themselves in making improvements.*

Being left for some years in a manner to themselves, they increased beyond expectation. They remained under the administration of their late governors, and other officers, who respected their privileges because they loved the colony. The governor whom Charles had been anxious to appoint, had no opportunity of exercising those illegal and extraordinary powers with which he had been invested. His death, in 1627, put an end to his authority, and prevented the colony's feeling its full extent. His successor, John Harvey, Esq. was nominated in March, 1629, and his commission and instructions were precisely the same with those of the former. He departed soon after for Virginia. The spirit of his administration was an exact counterpart of what had too long prevailed in England. He was severe in his extortions, proud in his councils, unjust and arbitrary in every department of his government. The Virginians, roused almost to madness by oppression, seized and sent him prisoner to England, accompanied with two deputies, to represent their grievancies and his misconduct. His behaviour was so thought of, that he was honoured with a new commission which confirmed his former powers, and he was sent back to Virginia in April, 1637. After that, his government was so excessively oppressive and cruel, that the complaints of the colonists became at length too loud to be longer neglected, and his commission was revoked in January, 1638-9. During his ten years administration, the Virginians were ruled rather as the vassals of an eastern despot, than as subjects entitled to English liberties; but it is to their credit, that, having tasted the sweets of a simple government, they opposed with a firm spirit, during the reign of Charles, the attempts of those who endeavoured to revive the patents, and to restore the corporation.

Sir William Berkeley was appointed governor the beginning of 1639. His instructions evidenced a prodigious change in colonial policy, which must be partly ascribed to the then state of affairs in England. He was directed to summon all the burgesses of the plantations, who, with the governor and council, were to constitute the Grand Assembly, with power to make acts for the government of the colony, as near as might be to

* Blund's Inquiry into the Rights of the British Colonies.

the laws of England—to cause speedy justice to be administered to all, according to English forms—and to forbid all trade with foreign vessels except upon necessity. Thus were the Virginians restored to that system of freedom which they had derived from the Virginia company, and which the writ of *quo warranto* had involved in the same ruin with the corporation itself.

Civil dissensions, however, took place, which were embittered by religious differences, and inflamed by acts made to prohibit the preaching of the doctrine of the Puritans. The discontented party presented a petition to the House of Commons, in the name of the Assembly, “praying for the restoration of the ancient patents and corporation government.” But the governor council and burgesses, no sooner heard of the transaction, than they transmitted an explicit disavowal of it. They sent also an address to King Charles, acknowledging his bounty and favour toward them, and earnestly desiring to continue under his immediate protection. In 1642, they declared in the form of an act, “that they were born under monarchy, and would never degenerate from the condition of their births, by being subject to any other government.” Nothing could be more acceptable than this act, which being presented to the King at York, drew from him an answer, in which he gave them the fullest assurances, that they should be always, immediately dependent upon the crown, and that the form of government should never be changed.

They remained unalterably attached to the cause of their sovereign. But when the Commons of England had triumphed over their European opponents, their attention was turned to the plantations; and an ordinance was passed in October, 1650, “for prohibiting trade with Barbadoes, Virginia, Bermuda and Antego.” It recited, that “in Virginia, and other places in America, there are colonies, which were planted at the cost, and settled by the people, and by the authority of this nation, which ought to be subordinate to, and dependent upon England—that they ever have been, and ought to be, subject to such laws and regulations as are, or shall be made by the Parliament—that divers acts of rebellion have been committed by many persons inhabiting Virginia, whereby they have set up themselves in opposition to this commonwealth.” It therefore declared them “*notorious robbers and traitors.*” PERSONS IN POWER GENERALLY REASON ALIKE AGAINST THOSE WHO OPPOSE THEIR AUTHORITY, AND DISPUTE THE LEGALITY

OR EQUITY OF THEIR MEASURES, whatever might be their sentiments when in a lower station, and while aggrieved by superiors. The ordinance authorised the Council of State to send a fleet thither, and to grant commissions to proper persons to enforce to obedience all such as stood opposed to the authority of Parliament. In consequence hereof commissioners were appointed, and a powerful fleet and army detached to reduce all their enemies to submission. They were to use their endeavours, by granting pardons and by other peaceful arts, to induce the colonists to obey the estate of England: but if these means should prove ineffectual, then they were to employ every act of hostility; to free those servants and slaves, of masters opposing the government, that would serve as soldiers to subdue them; and to cause the acts of Parliament to be executed, and justice to be administered in the name of the Commonwealth. After the arrival of the commissioners with the naval and military force, the Virginians refused to submit, till articles of surrender had been agreed upon, by which it was stipulated, "The plantation of Virginia, and all the inhabitants thereof, shall enjoy such freedoms and privileges as belong to the free people of England. The General Assembly, as formerly, shall convene and transact the affairs of the colony. The people of Virginia shall have a free trade, as the people of England, to all places, and with all nations. Virginia shall be free from all taxes, customs, and impositions whatsoever; and none shall be imposed on them without consent of the General Assembly; and neither forts nor castles shall be erected, nor garrisons maintained without their consent."*

This convention, entered into with arms in their hands, they supposed had secured the ancient limits of their country; its free trade; its exemption from taxation but by their own Assembly, and exclusion of military force from among them. Yet in every of these points was this convention violated by subsequent kings and parliaments, and other infractions of their constitution, equally dangerous, committed. The General Assembly, which was composed of the council of state and burgesses, sitting together and deciding by plurality of voices, was split into two houses, by which the council obtained a separate negative on their laws. Appeals from their supreme court, which had been fixed by law in their General Assembly, were arbitrarily removed to England, to be there heard before the king and

* Bland's Inquiry into the Rights of the British Colonies.

council. Instead of four hundred miles on the sea coast, they were reduced in the space of thirty years, to about one hundred miles. Their trade with foreigners was totally suppressed and, when carried to Great-Britain, was there loaded with imposts. It is unnecessary, however, to glean up the several instances of injury, as scattered through American and British history: and the more especially, as, by passing on to the accession of the present king, we shall find specimens of them all, aggravated, multiplied, and crowded within a small compass of time, so as to evince a fixed design of considering the rights of the people, whether natural, conventional, or chartered, as mere nullities. The colonies were taxed internally; their essential interest sacrificed to individuals in Great-Britain; their legislatures suspended; charters annulled; trials by juries taken away; their persons subjected to transportation across the Atlantic, and to trial before foreign judicatories; their supplications for redress thought beneath answer; themselves published as cowards in the councils of their mother country and courts of Europe; armed troops sent among them to enforce submission to these violences; and actual hostilities commenced against them. No alternative was presented but resistance or unconditional submission. Between these there could be no hesitation. They closed in the appeal to arms. They declared themselves Independent States. They confederated together in one great republic; thus securing to every State the benefit of an union of their whole force. They fought—they conquered—and obtained an honourable and glorious peace.

K E N T U C K Y.

Though the war which took place between England and France in the year 1755, terminated so gloriously to Great-Britain, and securely for the then colonies, still we remained ignorant of the whole of the fine country lying between the high hills, which rise from Great Sandy River, approximate to the Allegany mountain, and extending down the Ohio to its confluence with the Mississippi, and back to those ridges of mountains which traverse America in a south-west-by-west direction, until they are lost in the flat lands of West-Florida. However, certain men, called Long Hunters, from Virginia and North-Carolina, by penetrating these mountains, which ramify into a country two hundred miles over from east to west, called the wilderness, were fascinated with the beauty and luxuriance of the country on the western side.

A grant had been sold by the Six Nations of Indians to some British commissioners at Fort Stanwix, in 1768, which comprehended this country, and which afforded the Americans a pretext for a right to settle it; but those Indian natives who were not concerned in the grant, became dissatisfied with the prospect of a settlement which might become so dangerous a thorn in their side, and committed some massacres upon the first explorers of the country. However, after the expedition of Lord Dunmore, in 1774, and the battle at the mouth of the Great Kanaway, between the army of Colonel Lewes and the confederated tribes of Indians, they were in some measure quiet. The Assembly of Virginia began now to encourage the peopling that district of country called Kentucky, from the name of a river which runs nearly through the middle of it. This encouragement consisted in offering four hundred acres of land, to every person who engaged to build a cabin, clear a piece of land, and produce a crop of Indian corn. This was called a settlement right. Some hundreds of these settlements were made; but, in the mean time, Mr. Richard Henderson, of North-Carolina, a man of considerable abilities, and more enterprise, had obtained a grant from the Cherokee tribe of Indians for this same tract of country; and though it was contrary to the laws of the land for any private citizen to make purchases of the Indians, still Mr. Henderson persevered in his intention of establishing a colony of his own. He actually took possession of the country, with many of his followers, where he remained pretty quiet, making very little improvement, Virginia being at that time entirely occupied with the war, which had commenced between Great-Britain and the confederated States. Most of the young men from the back settlements of Virginia and Pennsylvania, who would have migrated to this country, having engaged in the war, formed that body of men, called Rifle-men; which not only checked the growth of the settlement, but so dried up the sources of emigration, that it was near being annihilated by the fury of the savages.

The legality of Mr. Henderson's claim was investigated by the State of Virginia in 1781; and though, according to existing laws, there could be no sort of equity in it, he having acted in contempt of the State, the legislature, to avoid feuds or disturbances, for Mr. Henderson had considerable influence, agreed, as an indemnification for the expense and trouble he had been at, that he should be allowed a tract of country twelve miles square, lying in the forks of the Ohio and Green rivers: a tract of his own choosing.

Virginia gave a farther reward and encouragement at this time to the first settlers, for the perils they had undergone in the establishment of their settlement, of a tract of one thousand acres, called a pre-emption right, to be laid off adjoining to the settlement of four hundred acres, the grantee only paying office-fees for the same. After this period (i. e. 1781) a land office was opened by the State, granting warrants for any quantity of unlocated land, upon condition of certain sums of the depreciated continental currency being paid into the treasury, at so much for one hundred acres. The great plenty and little value of this money soon caused the whole country to be located, which was one of the material causes of its rapid population.

It was necessary, in the management of this business, that care should be taken to prevent that perplexity and litigation, which the vague manner in which that business was executed in many instances would necessarily produce. For this purpose, three principal surveyors were appointed, who were to lay, or cause to be laid off, by their deputies, the different locations within the limits of their districts: this being done, and recorded in the office, the original survey was sent to the deputy register's office, there to be recorded; from thence it was sent to the principal register's office at Richmond, the seat of government, there to remain twelve months, in order that any person having a claim, by virtue of a prior location, might have an opportunity to enter a caveat, and prevent a surreptitious grant from issuing. Commissioners were also sent to adjust the claims of settlement and pre-emption rights: by which means order was preserved, and the government settled, of a district of country detached and separated at that time, more than two hundred miles from any other settled country.

The years 1783 and 1784 brought out vast numbers of emigrants from all parts of America, particularly the latter year, when it was supposed that in Kentucky alone, not less than twelve thousand persons became settlers; several Europeans from France, England, and Ireland, were among the number. In 1783, 1784, and 1785, great part of the country was surveyed and patented, and the people in the interior settlements pursued their business in as much quiet and safety as they could have done in any part of Europe. Court-houses were built in the different counties, and roads were opened for carriages, which seven years before had not been seen in the country. The roads prior to that time being barely sufficient for single horses to travel on.

In 1785, the district had grown so considerable from the great number of emigrants which had arrived, and that respectability which it had acquired, that it produced a disposition in the inhabitants to become an independent State, and to be admitted as another link in the great federal chain. A convention was immediately formed by sending deputies from the different counties, who met at Danville, for the purpose of taking the matter into consideration; when it was determined, after some debating, to petition Virginia for that purpose. However, this business was procrastinated; for finding, though they might separate whenever they chose, yet that it was optional with the legislature of Virginia to recommend them to be taken into the federal government, which they were not likely to do, and which it was certain could not be done without, they were content to remain as they were for that time.

The federal government in the course of the year 1785, undertook to lay off the country west of the Ohio, in such a manner as would answer the purpose of selling the land, and settling the country; but owing to a variety of causes, their progress was very slow. However, some land was surveyed in 1786 and 1787, and in the latter year a settlement was formed upon the Muskingum, which may be looked upon as the commencement of American settlements upon the western side of the Ohio. In 1788 and 1789, some farther surveying was done; but little since has been transacted in those parts, except wars between the Indians and settlers.

NORTH AND SOUTH-CAROLINA.

We give the history of the settlement of these States together, as for a very considerable period they formed but one colony. A few adventurers emigrated from the Massachusetts, and settled round Cape Fear, about the time of the restoration. They considered mere occupancy, with a transfer from the natives, without any grant from the king, as a good title to the lands which they possessed. They deemed themselves entitled to the same "civil privileges" as those of the country whence they had emigrated. For years they experienced the complicated miseries of want. They solicited the aid of their countrymen; and the general court, with an attention and humanity which did it the greatest honour, ordered an extensive contribution for their relief. But the final settlement of the province was effected equally through the rapacity of the courtiers of Charles II. and his own facility in rewarding those, to whom he was

greatly indebted, with a liberality that cost him little. The pretence, which had been used on former occasions, of a pious zeal for the propagation of the gospel among the Indians, was successfully employed to procure a grant of the immense region lying between the 36° of north latitude, and the river St. Matheo under the 31°. March 24, 1663, this territory was erected into a province by the name of Carolina, and conferred on Lord Clarendon, the Duke of Albemarle, Lord Craven, Lord Berkley, Lord Ashley, Sir George Carteret, Sir John Colleton, and Sir William Berkley, as absolute lords proprietaries for ever, saving the sovereign allegiance due to the crown. The charter seems to have been copied from that of Maryland, so extensive in its powers, and so noble in its privileges. The noblemen held their first meeting in May; and, at the desire of the New-England people above-mentioned, published proposals to all that would plant in Carolina. They declared, that all persons settling on Charles river, to the southward of Cape Fear, should have power to fortify its banks, taking the oath of allegiance to the king, and submitting to the government of the proprietaries—that the emigrants might present to them thirteen persons, in order that they might appoint a governor and council of six for three years—that an assembly, composed of the governor, the council, and delegates of the freemen, should be called as soon as circumstances would allow, with power to make laws, not contrary to those of England, nor of any validity, after the publication of the dissent of the proprietaries—that every one should enjoy the most perfect freedom in religion—that during five years, every freeman should be allowed one hundred acres of land, and fifty for every servant, paying only an half-penny an acre—and that the same freedom from customs, which had been confirmed by the royal charter, should be allowed to every one.

The proprietaries appointed Sir William Berkley, then Governor of Virginia, general superintendent of the affairs of the county of Albermarle, within the boundaries of which, a small plantation, of the New-Englanders probably, had been established for some years, on the north-eastern shores of the river Chowan. Sir William Berkley repaired to the county, confirmed and granted lands on the conditions before mentioned, appointed Mr. Drummond, the first governor, and likewise other officers, and then returned to Virginia.

The assembly being dissatisfied with the tenures by which they held their lands, petitioned the proprietaries, that the peo-

ple of Albemarle might hold their possession on the same terms on which the Virginians enjoyed theirs, which was granted.

In 1665, the proprietaries appointed John Yeamans, a respectable planter of Barbadoes, commander in chief of Clarendon county, stretching from Cape Fear to the river St. Matheo, and he was at the same time created a baronet. To secure its prosperity, the same powers were conferred, and the same constitution established, as those which had made Albemarle happy.

A settlement was also projected to the southward of Cape Ro-main, which acquired the name of Carteret. Thus a variety of separate and independent colonies, each of which had its own government, its own assembly, its own customs and laws, were established in Carolina.

In June the proprietaries obtained a second charter, which recited and confirmed the former. They were enabled to make laws for the province, with the consent of the freemen of their delegates; and likewise to grant titles of honour by the creation of a nobility. No one prerogative of the crown was reserved, except the sovereign dominion.

Samuel Stephens, Esq. was appointed governor of Albemarle in October 1667, and was commanded to act agreeable to the advice of a council of twelve, the one half of which he was to appoint, the other was to be chosen by the assembly. The Assembly was to be composed of the governor, the council, and twelve delegates chosen annually by the freeholders. Various regulations provided for the security of property; and no taxes were to be imposed without the consent of the Assembly. The proprietaries might mean no more, than that neither they, nor the governor and council, should impose taxes without the consent of the Assembly; but the mode of expression tended to confirm the people at large in the opinion of their being exempted from all taxes which had not the consent of their own Assembly. The settlers had their lands confirmed, and granted to be now held by the free tenure of soccage, expressing a certain rent and independence. All men are declared entitled to equal privileges, on taking the oath of allegiance to the king, and of fidelity to the proprietaries.

It was not till 1669 that an Assembly constituted as above mentioned was convened; when it was enacted, "none should be sued during five years for any cause of action arising out of the country, and none shall accept a power of attorney, to receive the debts contracted abroad." Hence this colony

was long considered as the refuge of the criminal, and the asylum of the fugitive debtor.

The proprietaries at length, dissatisfied with every system which they had hitherto devised for the government of their province, signed in July a body of fundamental constitutions compiled by the celebrated Locke, giving as a reason, "That we may establish a government agreeable to the monarchy of which Carolina is a part, and may avoid making too numerous a democracy."

By this edict a palatine was to be chosen from among the proprietaries for life; who was to act as president of the palatine court, composed of the whole, which was intrusted with the execution of the powers of the charter. A body of hereditary nobility was created, and denominated landgraves and caciques; the former were to be invested with four baronies, each consisting of twelve thousand acres, the latter to have two, containing one half of that quantity; and these estates were to descend with the dignities inseparable. There were to be as many landgraves as counties, and twice as many caciques, but no more. Two fifths of the counties, styled signiories and baronies, were to be possessed by the nobility; the other three fifths, called the colonies, were to be left among the people.

The provincial legislature, dignified with the name of Parliament, was to be biennial, and to consist of the proprietaries or landgraves, or the deputy of each, of the cacique nobility and of the representatives of the freeholders of every district, who were to meet in one apartment, and every member to enjoy an equal vote: but no business was to be proposed till it had been debated in the grand council, whose duty it was to prepare bills for parliamentary consideration. The Grand Council was to be composed of the governor, the nobility, and the deputies of the proprietaries (*these being absent*), and was invested with the executive of the province. The Church of England was alone to be allowed a public maintenance by Parliament; but every congregation might tax its own members for the support of its own ministers; and to every one was allowed, perfect freedom in religion. However the most degrading slavery was introduced, by investing in every man the property of his negro.*

* Locke's Works, vol. iv. p. 519, &c. 1779.

These constitutions, consisting of one hundred and twenty articles, and containing a great variety of perplexing regulations, were declared to be the sacred and unalterable rule of government in Carolina for ever: and yet they were never altogether adopted. The parties engaged in this act of legislation should have reflected, that the inhabitants had settled on conditions which were no longer in their power to abrogate; and that in the forms of government which had been actually established, the people had required an interest which could not be taken away without their consent.

A number of emigrants were sent over in January, 1670, under William Sayle, Esq. appointed governor of that part of the coast which lies south-west of Cape Carteret, to form a colony at Port Royal. They arrived safe; and as it was found impracticable to conform to the constitutions, it was determined to keep as close to them as possible. Sayle dying, Sir John Yeamans had his command extended to and over this colony, in August, 1671. This year several planters resorted from Clarendon on the north, and Port-Royal on the south, to the banks of Ashley river, for the convenience of pasture and tillage, and laid on the first high land the foundation of old Charleston. The proprietors promulgated temporary laws, till through a sufficient number of inhabitants, government could be administered according to the fundamental constitutions. The temporary laws were of no long duration, being derided by a people without whose consent they had been established.

In May, 1674, Joseph West, Esq. was appointed governor of the southern colony, in the room of Sir John Yeamans, with whose conduct the proprietaries were dissatisfied. But the difficulty of establishing the colony was not overcome for years; not till people repaired to it at their own expense, and men of estate ventured thither under the full persuasion of being fairly treated. In expectation of such treatment, the Dissenters being harassed by persecutions in England, and dreading a Popish successor, emigrated to Carolina in great numbers, and made a considerable part of the inhabitants. They acquired the honour of introducing religion into the province, while they strengthened it also by their personal accessions. But the promising appearances of the country inviting over many of a very different stamp, after a while disturbances followed.

The planters being informed that the Oyster-Point, so delightfully formed by the confluence of the rivers Ashley and Cooper, was more convenient than what was fixed upon eight years before,

and the proprietaries encouraging their inclination, they began to remove, and in the year 1680, laid the foundation of the present Charleston, and built thirty houses. It was instantly declared the port for the purposes of traffic, and the capital for the administration of government. It was long unhealthy; but the adjacent country being now cleared and cultivated, it is allowed to enjoy the most salubrious air of Carolina.

Though the province had been formed into manors and baronies, it was not till 1682 that it was divided into three counties. In the autumn of this year, Governor West held a Parliament, and afterward immediately resigned his administration to Mr. Joseph Moreton. Thence commenced a reiterated change of governors. Kyrle, West, Quarry, and Moreton, were successively appointed. There was a similar change of every public officer. These changes produced turbulence and faction, and the scenes of anarchy produced by these measures were not changed, nor the condition of the colony mended, by the arrival of Governor Seth Sothel, in 1683, who was sent in hope of quieting the disorders by his authority, as he had purchased Lord Clarendon's share of the province. He was guilty of such bribery, extortion, injustice, rapacity, breach of trust, and disobedience of orders, for five years, that the inhabitants, driven almost to despair, seized him with a view of sending him to England to answer to their complaints; but upon his entreaties, and offering to submit their mutual accusations to the next Assembly, they accepted his proposal. The Assembly gave judgment against him in all the above-mentioned particulars, and compelled him to abjure the country for twelve months, and the government for ever.

Charleston having been made the provincial port, the first collector was established there in 1685. The governor and council were at the same time ordered, "Not to fail to show their forwardness in assisting the collection of the duty on tobacco transported to other colonies, and in seizing ships that presumed to trade contrary to the acts of navigation." Little regard was paid to orders so contrary to the views of every one. An illicit trade was not only practised, but justified under a clause of the patent, which the people considered of superior force to the law. Though the royal grant of 1665 was passed subsequent to the act of navigation, the present exemption was insisted upon with the same spirit, that it was contended during this reign, that a king of England may dispense with the law.

The principle of the Carolinians, and the doctrine so fashionable at the Court of James, were therefore exactly the same.

James Colleton, Esq. a proprietary, was appointed governor in August, 1686. The next year he called an Assembly, in which he and his party took upon them to pass such laws as lost him the affections of the people. During the ferment that followed, Seth Sothel, whom we have seen banished from Albemarle, suddenly arrived at Charleston. Countenanced by a powerful party, and presuming on his powers as a proprietary, he seized the reins of government in 1690, notwithstanding the opposition of the governor and council. A general return of members was procured, who readily sanctioned by their votes whatever was dictated by those who had thus acquired power. Colleton, whose conduct had been far from blameless, was instantly impeached of high crimes and misdemeanors, disabled from holding any office, and banished. Others were fined, imprisoned, and expelled the province. The proprietaries appointed a new governor, and in the year, 1692, upon the requisition of the Carolinians, abrogated Mr. Locke's system of laws, the fundamental constitutions, which, from having answered their end, introduced only dissatisfaction and disorders, that were not cured till the final dissolution of the proprietary government.* The operation and fate of Mr. Locke's system may convince us of this truth, that a person "may defend the principles of liberty and the rights of mankind, with great abilities and success; and yet after all, when called upon to produce a plan of legislation, he may astonish the world with a signal absurdity."†

Governor Archdale arrived at Carolina in August 1695: he managed with great prudence, and succeeded so well that the Assembly voted him an address of thanks. He was succeeded by Joseph Blake, Esq. whose sentiments were so liberal, that though a Dissenter, he prevailed with the Assembly to settle one hundred and fifty pounds per annum upon the Episcopal minister at Charleston, for ever, and likewise to furnish him with a good house, a glebe, and two servants. A very different spirit wrought in the Earl of Bath, when he succeeded to the power of palatine, and became eldest proprietary, in 1701: being a zealot for the Church of England, he was ambitious of el-

* Chalmers' Political Annals, under the head of Carolina.

† Defence of the American Constitutions of Government, by John Adams, Esq. p. 365.

tablishing its worship, and excluding non-episcopalians from a share in the government of Carolina; a similar principle was at that time too prevalent in England. His views were seconded by the pliability of Governor Moor, who was after a while succeeded by Sir Nathaniel Johnson. Then the Assembly being convened, a bill was brought in for the more effectual preservation of the government, by requiring all persons chosen members of the Assembly, to conform to religious worship, and receive the sacrament of the Lord's Supper, according to the usage of the Church of England. By this act, all Dissenters were disqualified from sitting in the Assembly, though legally elected, and the candidate who had the greatest number of voices, after the disqualified Dissenter, was to be admitted. The passing of this act was unconstitutional and oppressive. Another bill was passed for establishing religious worship in the province, according to the Church of England, and also for the erecting of churches, the maintenance of ministers, and the building of convenient parsonages. Both these acts were afterward signed and settled by John Lord Granville, then palatine, for himself and the other proprietors. In consequence of the last act, many oppressions were committed by the government against the Dissenters, who laboured under these and other grievances, till the matter at length was brought before the House of Lords, who, having fully weighed the same, addressed the Queen in favour of the Carolinians, and the laws complained of in 1706 were declared null and void.

About the year 1710, a number of Palatines from Germany, who had been reduced to circumstances of great indigence by a calamitous war, took up their residence in this State. The proprietors of Carolina knowing that the value of their lands depended on the strength of their settlements, determined to give every possible encouragement to such emigrants. Ships were accordingly provided for their transportation, and instructions given to Governor Tynte, to allow one hundred acres of land for every man, woman, and child, free of quit rents for the first ten years; but at the expiration of that term, to pay one penny per acre annual rent, for ever, according to the usages and customs of the province. Upon their arrival Governor Tynte granted them a tract of land in North-Carolina, since called Albemarle and Bath precincts, where they settled, and flattered themselves with having found in the hideous wilderness, a happy retreat from the desolations of a war which then raged in Europe.

In the year 1712, a dangerous conspiracy was formed by the Coree and Tuscorora tribes of Indians, to murder and expel this infant colony. The foundation for this conspiracy is not known; probably they were offended at the incroachments upon their hunting ground. They managed their conspiracy with great cunning and profound secrecy. They surrounded their principle town with a breast work to secure their families. Here the warriors convened to the number of twelve hundred. From this place of rendezvous they sent out small parties, by different roads, who entered the settlement under the mask of friendship. At the change of the full moon all of them had agreed to begin their murderous operations the same night. When the night came, they entered the houses of the planters, demanding provisions; and pretending to be offended, fell to murdering men, women, and children, without mercy or distinction. One hundred and thirty-seven settlers, among whom were a Swiss baron, and almost all the poor Palatines that had lately come into the country, were slaughtered the first night. Such was the secrecy and dispatch of the Indians in this expedition, that none knew what had befallen his neighbour until the barbarians had reached his own door. Some few, however, escaped, and gave the alarm. The militia assembled in arms, and kept watch day and night until the news of the sad disaster had reached the province of South-Carolina. Governor Craven lost no time in sending a force to their relief. The Assembly voted four thousand pounds for the service of the war. A body of six hundred militia, under the command of Colonel Barnwell, and three hundred and sixty-six Indians of different tribes, with different commanders, marched with great expedition through a hideous wilderness to their assistance. In their first encounter with the Indians they killed three hundred and took one hundred prisoners. After this defeat, the Tuscororas retreated to their fortified town, which was shortly after surrendered to Colonel Barnwell. In this expedition it was computed that near a thousand Tuscororas were killed, wounded, and taken. The remainder of the tribe soon after abandoned their country, and joined the Five Nations, with whom they have ever since remained. After this, the infant colony remained in peace, and continued to flourish till about the year 1729, when seven of the proprietors, for a valuable consideration, vested their property and jurisdiction in the crown, and the colony was divided into two separate provinces, by the name of North and South-Carolina, and their present limits established by an order

of George II. From this period to the revolution in 1776, the history of North-Carolina is unpublished, and of course, in a great measure, unknown, except to those who have had access to the records of the province. Some of the most important events that have since taken place, have, however, been already mentioned in the general history of the United States.

South-Carolina, from the period of its becoming a separate colony, began to flourish. It was protected by a government, formed on the plan of the English constitution. Under the fostering care of the Mother Country, its growth was astonishingly rapid. Between the years 1763 and 1775, the number of inhabitants was more than doubled. No one indulged a wish for a change in their political constitution, till the memorable stamp act passed in 1765.

From this period till 1775, as we have seen, various attempts were made by Great-Britain to tax her colonies, without their consent; these attempts were invariably opposed. The Congress, who met at Philadelphia, unanimously approved the opposition, and on the 19th of April war commenced.

During the vigorous contest for independence this State was a great sufferer. For three years it was the seat of war. It feels and laments the loss of many respectable citizens, who fell in the glorious struggle for the rights of man. Since the peace, it has been emerging from that melancholy confusion and poverty, in which it was generally involved by the devastations of a relentless enemy. The inhabitants are fast multiplying by emigrations from other States; the agricultural interests of the State are reviving; commerce is flourishing; economy is becoming more fashionable; and science begins to spread her salutary influences amongst the citizens. And under the operation of the present government, this State, from her natural, commercial and agricultural advantages, and the abilities of her leading characters, promises to become one of the richest in the Union.*

TERRITORY S. OF THE OHIO.

The eastern parts of this district were explored by Colonels Wood, Patton, Buchanan, Captain Charles Campbell and Dr. T. Walker, each of whom were concerned in large grants of

* See Ramfay's History of the Revolution in South-Carolina, and the History of Carolina and Georgia, anonymous, supposed to be by Hewett.

lands from the government, as early as between the years of 1740 and 1750. In 1754, at the commencement of the French war, not more than fifty families had settled here, who were either destroyed or driven off by the Indians before the close of the following year. It remained uninhabited till 1765, when the settlement of it re-commenced; and, in 1773, such was the vast accession of emigrants, that the country, as far west as the long island of Holstein, an extent of more than one hundred and twenty miles in length from east to west, was well peopled.

In 1774, a war broke out with the northern Indians over the Ohio, which issued in their suing for peace, which was granted them on easy terms.

The year 1776 was signalized by a formidable invasion of the Cherokees, contrived by the British superintendant, Mr. Steuart. Their intention was to depopulate the country as far as the Kanhawa, because this brave people had rejected, with a noble firmness and indignation, the proposals of Henry Steuart and Alexander Camerison for joining the British standard, and were almost unanimous in their resolution to support the measures of Congress. This invasion terminated in a total defeat of the Indians.

In 1780, the *Tories* of the western parts of North-Carolina and Virginia, emboldened by the reduction of Charleston by the British, embodied in armed parties, and proceeded towards the lead mines on the Kanhawa, to take possession of some lead stores at that place, but were defeated in their attempt by the vigilance of Colonel A. Campbell and Colonel Chockett.

Various other movements took place in the course of this year, but the most interesting and brilliant was the battle of King's mountain, which was fought and won by about nine hundred mountaineers, as the veteran sons of this district were called, commanded by the brave General William Campbell, against a party of the British under the command of Colonel Ferguson. Upwards of one thousand one hundred of the enemy were either killed, wounded, or taken; among the former was Colonel Ferguson, an officer of distinguished merit.* In arousing the inhabitants, issuing orders, collecting the forces, and in arranging and animating the men, at the place of rendezvous, previous to this successful expedition, much was

* See Ramfay's *Revol. South Carolina*, vol. ii. page 181.

done by the activity and decision of Colonel Arthur Campbell, the senior officer of the district, to whom much praise is due.

Soon after this, to defeat a meditated invasion of the Cherokee Indians, which was discovered by NANCY WARD, an Indian woman, called, from this circumstance, the western *Pocahonta*, Colonel A. Campbell, with seven hundred mountaineers, well mounted, penetrated far into the Cherokee country, introduced the new and successful mode of fighting Indians, on horseback, accomplished his designs, and returned in January, 1781.

In the celebrated battle at Guildford, March 15, 1781, the mountaineers, under General W. Campbell, who on that day commanded with great applause the left wing of the army, behaved with their usual gallantry. This nearly closed the active part which the mountain men took in the American war.

In 1782, the legislature of North-Carolina appointed commissioners to explore the western part of the State, by which is meant the lands included in Davidson county, those between the south boundary of this county, and those between the rivers Mississippi and Tennessee, and their orders were to report to the succeeding legislature, which part was best for the payment of the bounty promised to the officers and soldiers of the continental line of that State; and they accordingly did explore the before-described tract of country, and reported to the legislature in the spring of the year 1783. A few families had settled in this country in the year 1780, under the guidance of Colonel James Robertson, on Cumberland river, and called the place Nashville, in honour of Brigadier-general Francis Nash, who fell at German town in the year 1777; but their numbers were trivial until the year 1783, after the peace had taken place, and after an act had passed, directing the military or bounty warrants of the officers and soldiers to be located in this county. These circumstances induced many officers and soldiers to repair immediately thither, to secure and settle their lands; and such as did not chuse to go, sold their warrants to citizens who did go: in consequence of this, many people from almost every State in the Union became purchasers of these military warrants, and are since become residents of this county; and many valuable and opulent families have removed to it from the Natches. Colonel Robertson, when he settled at Nashville, was upwards of two hundred miles distant, to the west-ward, from any other settlement in his own State, and was equally distant from the then settled parts of Kentucky. Hence it will

readily be supported, that himself and party were in danger every hour of being cut off by the Indians, against whom his principal security was, that he was as far distant from them as from the white people; and slender as this security may appear, his party never sustained from them any damage, but what was done by parties of hunters, who happened to find out his settlement.

In 1785, in conformity to the resolves of Congress of April 23, 1784, the inhabitants of this district essayed to form themselves into a body politic, by the name of the "State of Frankland;" but, differing among themselves as to the form of government, and about other matters, in the issue of which some blood was shed, and being opposed by some leading characters in the eastern parts, the scheme was given up, and the inhabitants remained in general peaceable until 1790, when Congress established their present government. Since this period, some late incursions of the Indians excepted, the inhabitants have been peaceable and prosperous.

GEORGIA.

The settlement of a colony between the rivers Savannah and Alatomaha was meditated in England in 1732, for the accommodation of poor people in Great-Britain and Ireland, and for the farther security of Carolina. Private compassion and public spirit conspired to promote the benevolent design. Humane and opulent men suggested a plan of transporting a number of indigent families to this part of America, free of expence. For this purpose they applied to the King, George the Second, and obtained from him letters patent, bearing date June 9, 1732, for legally carrying into execution what they had generously projected. They called the new province Georgia, in honour of the King, who encouraged the plan. A corporation, consisting of twenty-one persons, was constituted by the name of the trustees for settling and establishing the colony of Georgia, which was separated from Carolina by the river Savannah. The trustees having at first set an example themselves, by largely contributing to the scheme, undertook also to solicit benefactions from others, and to apply the money towards clothing, arming, purchasing utensils for cultivation, and transporting such poor people as should consent to go over and begin a settlement. They did not confine their charitable views to the subjects of Britain alone, but wisely opened a door for the

indigent and oppressed Protestants of other nations. To prevent a misapplication of the money, it was deposited in the Bank of England.

About the middle of July, 1732, the trustees for Georgia held their first meeting, and chose Lord Percival president of the corporation, and ordered a common seal to be made. In November following, one hundred and sixteen settlers embarked for Georgia, to be conveyed thither free of expense, furnished with every thing requisite for building and for cultivating the soil. James Oglethorpe, one of the trustees, and an active promoter of the settlement, embarked as the head and director of these settlers. They arrived at Charleston early in the next year, where they met with a friendly reception from the governor and council. Mr. Oglethorpe, accompanied by William Bull, shortly after his arrival visited Georgia, and after reconnoitring the country, marked the spot on which Savannah now stands, as the fittest to begin a settlement. Here they accordingly began and built a small fort, and a number of small huts for their defence and accommodation. Such of the settlers as were able to bear arms were embodied, and well appointed with officers, arms and ammunition. A treaty of friendship was concluded between them and their neighbours, and the Creek Indians, and every thing wore the aspect of peace and future prosperity.

In the mean time the trustees of Georgia had been employed in framing a plan of settlement, and establishing such public regulations as they judged most proper for answering the great end of the corporation. In the general plan they considered each inhabitant both as a planter and as a soldier, who must be provided with arms and ammunition for defence, as well as with tools and utensils for cultivation. As the strength of the province was the object in view, they agreed to establish such tenures for holding lands in it, as they judged most favourable for military establishment. Each tract of land granted was considered as a military fief, for which the possessor was to appear in arms, and take the field, when called upon for the public defence. To prevent large tracts from falling, in process of time, to one person, they agreed to grant their lands in tail male, in preference to tail general. On the termination of the estate in tail male, the lands were to revert to trust; and such lands thus reverting were to be granted again to such persons, as the common council of the trust should judge most advantageous for the colony; only the trustees in such a case were to pay special regard to the daughters of such persons as had made

improvements on their lots, especially when not already provided for by marriage. The wives of such persons as should survive them, were to be, during their lives, entitled to the mansion-house, and one half of the lands improved by their husbands. No man was to be permitted to depart the province without licence. If any of the lands granted by the trustees were not cultivated, cleared and fenced round about with a worm fence, or pales six feet high, within eighteen years from the date of the grant, such part was to revert to the trust, and the grant with respect to it to be void. All forfeitures for non-residences, high treasons, felonies, &c. were to the trustees, for the use and benefit of the colony. THE USE OF NEGROES TO BE ABSOLUTELY PROHIBITED, *and also*, THE IMPORTATION OF RUM. None of the colonists were to be permitted to trade with the Indians, but such as should obtain a special licence for that purpose.

These were some of the fundamental regulations established by the trustees of Georgia, and perhaps the imagination could scarcely have framed a system of rules, worse adapted to the circumstances and situation of the poor settlers, and of more pernicious consequence to the prosperity of the province. Yet, although the trustees were greatly mistaken with respect to the plan of settlement, it must be acknowledged their views were generous. As the people sent out by them were the poor and unfortunate, who were to be provided with necessities at their public store, they received their lands upon condition of cultivation, personal residence, and defence.

Silk and wine being the chief articles intended to be raised, they judged negroes were not requisite for these purposes. As the colony was designed to be a barrier to South-Carolina against the Spanish settlement at Augustine, they imagined that negroes would rather weaken than strengthen it, and that such poor colonists would run in debt, and ruin themselves by purchasing them. Rum was judged pernicious to health, and ruinous to the infant settlement. A free trade with the Indians was a thing that might have had a tendency to have involved the people in quarrels and troubles with the powerful savages, and have exposed them to danger and destruction. Such were, probably, the motives which induced the trustees to impose such foolish and ridiculous restrictions on the colony. For by granting their small estates in tail male, they drove the settlers from Georgia, who soon found that abundance of lands could be obtained in America upon a larger scale, and on much better terms. By the prohibition of negroes, an act which

we must, however, have praised if it had originated in principles of humanity, they rendered it impracticable, in such a climate, to make any impression on the thick forests, Europeans being utterly unqualified for the heavy task. By discharging a trade with the West-Indies, they deprived the colonists of an excellent and convenient market for their lumber, of which they had abundance on their lands. The trustees, like other distant legislators, were liable to many errors and mistakes; and however good their design, their rules were found improper and impracticable. The Carolinians plainly perceived that they would prove insurmountable obstacles to the progress and prosperity of the colony, and therefore, from motives of pity, began to invite the poor Georgians to come over Savannah river and settle into Carolina, being convinced that they could never succeed under such impolitic and oppressive restrictions.

Besides the large sums of money which the trustees had expended for the settlement of Georgia, the Parliament had also granted, during the two last years, thirty-six thousand pounds towards carrying into execution the purpose of the corporation. But after the representation and memorial from the legislature of Carolina reached Britain, the nation considered Georgia to be of the utmost importance to the British settlements in America, and began to make still more vigorous efforts for its speedy population. The first embarkations of poor people from England, being collected from towns and cities, were found equally as idle and useless members of society abroad as they had been at home. An hardy and bold race of men, inured to rural labour and fatigue, they were persuaded, would be much better adapted both for cultivation and defence. To find men possessed of these qualifications, they turned their eyes to Germany and the Highlands of Scotland, and resolved to send over a number of Scotch and German labourers to their infant province. When they published their terms at Inverness, an hundred and thirty Highlanders immediately accepted them, and were transported to Georgia. A township on the river Alatomaha, which was considered as the boundary between the British and Spanish territories, was allotted for the Highlanders, in which dangerous situation they settled, and built a town, which they called New-Inverness. About the same time an hundred and seventy Germans embarked with James Oglethorpe, and were fixed in another quarter; so that, in the space of three years, Georgia received above four hundred British sub-

jects, and about an hundred and seventy foreigners. Afterwards several adventurers both from Scotland and Germany, followed their countrymen, and added farther strength to the province, and the trustees flattered themselves with the hope of soon seeing it in a promising condition.

Their hopes, however, were vain: their injudicious regulations and restrictions, the wars in which they were involved with the Spaniards and Indians, and the frequent insurrections among themselves, threw the colony into a state of confusion and wretchedness; their oppressed situation was represented to the trustees by repeated complaints; till at length, finding that the province languished under their care, and with the complaints of the people, they, in the year 1752, surrendered their charter to the King, and it was made a royal government. In consequence of which, his Majesty appointed John Reynolds, an officer of the navy, governor of the province, and a legislature, similar to that of the other royal governments in America, was established in it. Great had been the expense which the Mother Country had already incurred, besides private benefactions, for supporting this colony; and small had been the returns yet made by it. The vestiges of cultivation were scarcely perceptible in the forests, and in England all commerce with it was neglected and despised. At this time the whole annual exports of Georgia did not amount to ten thousand pounds sterling. Though the people now possessed the same liberties and privileges which were enjoyed by their neighbours, yet several years elapsed before the value of the lands in Georgia was known, and that spirit of industry broke out in it, which afterwards diffused its happy influence over the country.

In the year 1740, the late Rev. George Whitefield founded an orphan house academy in Georgia, about twelve miles from Savannah. For the support of this, he collected large sums of money from all denominations of Christians, both in England and America. A part of this money was expended in erecting proper buildings to accommodate the students, and a part in supporting them. In 1768 it was proposed, that the orphan house should be erected into a college; whereupon Mr. Whitefield applied to the Crown for a charter, but, in consequence of some dispute, the affair of a charter was given up, and Mr. Whitefield made his assignment of the orphan house, *in trust*; to the late Countess of Huntingdon. Mr. Whitefield died at Newbury port, in New-England, September 30, 1770:

in the fifty-sixth year of his age, and was buried under the Presbyterian church in that place.

Soon after his death, a charter was granted to his institution in Georgia, and the Rev. Mr. Piercy was appointed president of the college. Mr. Piercy accordingly went over to execute his office, but, unfortunately, on the 30th of May, 1775, the orphan house building caught fire, and was entirely consumed, except the two wings, which are still remaining. The American war soon after came on, and put every thing into confusion, and the funds have ever since lain in an unproductive state. It is probable, that the college estate may hereafter be so incorporated with the university of Georgia, as to subserve the original and pious purposes of its founder.

From the time Georgia became a royal government, in 1752, till the peace of Paris, in 1763, she struggled under many difficulties, arising from the want of credit from friends, and the frequent molestations of enemies. The good effects of the peace were sensibly felt in the province of Georgia. From this time it began to flourish, under the fatherly care of Governor Wright.

During the late war Georgia was over-run by the British troops, and the inhabitants were obliged to flee into the neighbouring States for safety. The sufferings and losses of its citizens were as great, in proportion to their numbers and wealth, as in any of the States. Since the peace the progress of the population of this State has been rapid: its growth in improvement and population has, however, been checked by the hostile irruptions of the Creek Indians, which have been frequent, and very distressing to the frontier inhabitants.*

Having thus briefly sketched the history of the settlement of the States comprehended in this division, we now proceed to a more particular description of them.

* For a more minute historical account of this State, see Hewitt's History of South-Carolina and Georgia.

STATE OF MARYLAND.

SITUATION, EXTENT, AND BOUNDARIES.

THIS State is situated between $37^{\circ} 56'$ and $39^{\circ} 44'$ north latitude, and 0° and $4^{\circ} 30'$ west longitude, from Philadelphia—its length is about one hundred and thirty-four miles, and its breadth one hundred and ten. It is bounded on the north by the State of Pennsylvania; on the east by the State of Delaware; and on the south-east and south by the Atlantic ocean; and a line drawn from the ocean over the peninsula (dividing it from Accomack county in Virginia) to the mouth of the Potomack river; thence up the Potomack to its source; thence by a north line till it intersects the southern boundary of Pennsylvania, in latitude $39^{\circ} 43' 18''$; so that it has Virginia on the south, south-west and west; it contains about fourteen thousand square miles, of which from one-sixth to one-fourth it water.

AIR AND CLIMATE.

The climate of this State is in general mild and agreeable, suited to agricultural productions, and a great variety of fruit trees: the air in the interior of the country is salubrious, and favourable to the inhabitants, who, in the hilly parts, are as healthy as in any part of the Union; but in the flat lands, in the neighbourhood of marshes and stagnant waters, as in the other Southern States, they are subject to intermittents and other complaints common to swampy situations.

FACE OF THE COUNTRY, &c.

East of the blue ridge of mountains, which stretches across the western part of this State, the land, like that in all the Southern States, is generally level and free of stones; and ap-

pears to have been made much in the same way; of course the soil must be similar, and the natural growth not remarkably different.

The ground is uniformly level and low in most of the counties on the eastern shore, and consequently covered in many places with stagnant water, except where it is intersected by numerous creeks. Here also are large tracts of marsh, which, during the day, load the atmosphere with vapour, that again falls in dew in the close of the summer and fall seasons.

Chesapeak bay divides this State into the eastern and western divisions. This bay, which is the largest in the United States, has been already described.* It affords many good fisheries, and is remarkable for the excellence of its crabs, and also for a particular species of wild duck, called CANVAS BACK. In a commercial view, this bay is of immense advantage to the State; it receives a number of large rivers. From the eastern shore in Maryland, among other smaller ones, it receives the Pocomoke, Nantikoke, Choptank, Chester and Elk rivers; from the north, the rapid Susquehannah; and from the west, the Patapsco, Severn, Patuxent and Potomack, half of which is in Maryland, and half in Virginia. Except the Susquehannah and Potomack, these are small rivers. Patapsco river is but about thirty or forty yards wide at the ferry, just before it empties into the basin upon which Baltimore stands; its source is in York county, in Pennsylvania; its course is southwardly till it reaches Elkridge landing, about eight miles westward of Baltimore; it then turns eastward, in a broad bay-like stream, by Baltimore, which it leaves on the north, and passes into the Chesapeak.

The entrance into Baltimore harbour, about a mile below Fell's Point, is hardly pistol shot across, and of course may be easily defended against naval force.

Severn is a short, inconsiderable river, passing by Annapolis, which it leaves to the south, emptying, by a broad mouth, into the Chesapeak.

Patuxent is a larger river than the Patapsco; it rises in Ann-Arundel county, and runs south-eastwardly, and then east into the bay, fifteen or twenty miles north of the mouth of the Potomack. There are also several small rivers, such as the Wighcomico, Eastern Branch, Monocacy and Conegocheague, which empty into the Potomack from the Maryland side.

* Page 195, Vol. I.

SOIL AND PRODUCTIONS.

The soil of the good land in Maryland is of such a nature and quality as to produce from twelve to sixteen bushels of wheat, or from twenty to thirty bushels of Indian corn per acre. Ten bushels of wheat, and fifteen bushels of corn per acre, may be the annual average crops in the State at large.

Wheat and tobacco are the staple commodities. Tobacco is generally cultivated in sets, by negroes, in the following manner: The seed is sown in beds of fine mould, and transplanted the beginning of May; the plants are set at the distance of three or four feet from each other, and are hilled and kept continually free of weeds: when as many leaves have shot out as the soil will nourish to advantage, the top of the plant is broken off, which prevents its growing higher; it is carefully kept clear of worms, and the suckers, which put out between the leaves, are taken off at proper times, till the plant arrives at perfection, which is in August; when the leaves turn of a brownish colour, and begin to be spotted, the plant is cut down and hung up to dry, after having sweated in heaps one night. When it can be handled without crumbling, which is always in moist weather, the leaves are stripped from the stalk, and tied in bundles, and packed for exportation in hogheads, containing eight or nine hundred pounds. No suckers nor ground leaves are allowed to be merchantable. An industrious person may manage six thousand plants of tobacco, which yield a thousand pounds, and four acres of Indian corn.

In the interior country, on the uplands, considerable quantities of hemp and flax are raised. As long ago as 1751, in the month of October, no less than sixty waggons loaded with flax seed came down to Baltimore from the back country.

Two articles are said to be peculiar to Maryland, viz. the genuine *white* wheat, which grows in Kent, Queen Ann's and Talbot counties, on the eastern shore, and which degenerates in other places, and the bright *kite's foot* tobacco, which is produced at Elkridge, on the Patuxent, on the western shore.

Among other kinds of timber is the oak, of several kinds, which is of a straight grain, and easily rives into staves, for exportation. The black walnut is in demand for cabinet, tables and other furniture. The apples of this State are large, but

mealy; the peaches plenty and good; from these the inhabitants distil cyder and peach brandy.

In Worcester county a species of grape vine, of a peculiar kind, has been discovered by a Mr. Jones, of Indian river. The bark is of a grey colour, very smooth, and the wood of a firm texture. They delight in the high sandy soil, but will thrive very well in the Cyprus swamps. The leaf is very much like that of the English grape vine, such as is propagated in the gardens near Philadelphia for table use.

The grape is much larger than the English, of an oval shape, and, when quite ripe, is black, adorned with a number of pale red specks, which, on handling, rub off. The pulp is a little like the fox grape, but in taste more delicious. These grapes are ripe in October, and yield an incredible quantity of juice, which, with proper management, would no doubt make a valuable wine.

Mr. Jones employed a person to gather about three bushels and one peck of them when ripe, and immediately had them pressed; which, to his surprise, yielded twelve gallons of pure juice, though a good quantity must have been lost in the pressing.

In about twelve hours after putting the juice in a keg it began to ferment, and he suffered it to go on till it got to be so violent, that it might be heard all over a large room. It continued in that state for three days. He then checked it, fearing it might turn acid, though, he says, he was afterwards convinced, that if he had suffered it to ferment as long again, it would have separated the vinous parts from the fleshy, and given greater fineness to the liquor.

After this it was racked off, and before cold weather buried in the garden, the top about six inches under ground; where having continued till the summer following, he could not discover that it had in the least altered, either in taste or colour. He observes farther, that, after eating a quantity of them, or drinking the juice, they leave an astringency, as claret is apt to do.

There is an immense quantity of these vines growing on the beach, open to the sea; and they are also found in great plenty upon the ridges and in the swamps. Since their discovery Mr. Jones has transplanted a number of them into his vineyard, from which, in a year or two more, he expects to make a wine much better than is commonly imported.

The forests abound with nuts of various kinds, which are collectively called *mast*; on this mast great numbers of swine are fed, which run wild in the woods; these swine, when fated,

are caught, killed, barrelled, and exported in great quantities. This traffic formerly was carried on to a very considerable extent. Mines of iron ore are found in several parts of this State, of a superior quality.

CIVIL DIVISIONS AND CHIEF TOWNS.

This State is divided into nineteen counties, eleven of which are on the western shore of Chesapeake bay, viz. Hartford, Baltimore, Ann-Arundel, Frederick, Allegany, Washington, Montgomery, Prince George, Calvert, Charles and St. Mary's; and eight on the eastern shore, viz. Cecil, Kent, Queen Ann, Caroline, Talbot, Somerset, Dorchester and Worcester. The principal towns in this State are as follows:

ANNAPOLIS.

Annapolis (city) is the capital of Maryland, and the wealthiest town of its size in America; it is situated at the mouth of Severn River, and was originally known by that name, which was changed for its present one in 1694, when it was made a port town, and the residence of a collector and naval officer: it stands on a healthy spot, thirty miles south of Baltimore, in north latitude $29^{\circ} 25'$; it is a place of but little note in the commercial world. The houses, about two hundred and sixty in number, are generally large and elegant, indicative of great wealth; the number of inhabitants does not exceed two thousand. The design of those who planned the city was to have the whole in the form of a circle, with the streets like radii, beginning at the center where the State House stands, and thence diverging in every direction. The principal part of the buildings are arranged agreeably to this awkward and stupid plan. It has a State House, which is an elegant building.

BALTIMORE.

Baltimore has had the most rapid growth of any town on the continent, and is the fourth in size and the fifth in trade in the United States.* It lies in latitude $39^{\circ} 21'$, on the north side of Patapsco River, around what is called the Basin, in which the water at common tides, is about five or six feet deep. Baltimore is divided into the town and Fell's Point by a creek, over which are two bridges. At Fell's Point the water is deep enough

* In point of size, the towns in the United States may be ranked in this order -- Philadelphia, New-York, Boston, Baltimore, Charleston, &c. In point of trade, New-York, Philadelphia, Boston, Charleston, Baltimore, &c.

for ships of burden; but small vessels only go up to the town. The situation of the town is low, and was formerly unhealthy; but the increase of houses, and, of course, of smoke, the tendency of which is to destroy or dispel damp and unwholesome vapours, and the improvements that have been made, particularly that of paving the streets, have rendered it tolerably healthy. The houses were numbered in 1787, and found to be one thousand nine hundred and fifty-five, about twelve hundred of which were in the town, and the rest at Fell's Point; the present number is about two thousand three hundred. The number of warehouses and stores are from one hundred and eighty to two hundred, and of churches nine, which belong to German Calvinists and Lutherans, Episcopalians, Presbyterians, Roman Catholics, Baptists, Methodists, Quakers and Nicolites, or New Quakers. The number of inhabitants in the town and precincts, according to the census of 1790, was thirteen thousand five hundred and three; they have greatly increased since that time.

Market-street is the principal street in the town, and runs nearly east and west a mile in length, parallel with the water: this is crossed by several other streets leading from the water, a number of which, particularly Calvert, South and Gay streets, are well built. North and east of the town the land rises and affords a fine prospect of the town and bay. Belvidera, the seat of Colonel Howard, exhibits a fine landscape—the town—the point—the shipping, both in the basin and at Fell's Point—the bay, as far as the eye can reach—the rising ground on the right and left of the harbour—a grove of trees on the declivity at the right—a stream of water breaking over the rocks at the foot of the hill on the left—all conspire to complete the beauty and grandeur of the prospect.

GEORGE-TOWN.

George-town stands on the bank of the Potomack river, about an hundred and sixty miles from its entrance into Chesapeake bay. The ground on which it stands is very broken, being a cluster of little hills, which though at present elevated considerably above the surface of the river, were, probably, at some former period overflowed, as at the depth of eight or ten feet below the surface marine shells having been found. Dr. Martin concludes an account of the climate and diseases of this town in the following words:

“ Upon the whole, George-town and its vicinity may be considered as a healthy part of America; and in any disputes

about the propriety of the seat of the general government being fixed here, no objection can be urged against it on account of its diseases."

FREDERICK-TOWN.

Frederick-town is a fine flourishing inland town, of upwards of three hundred houses, built principally of brick and stone, and mostly on one broad street: it is situated in a fertile country, about four miles south of Catokton mountain, and is a place of considerable trade; it has four places for public worship; one for Presbyterians, two for Dutch Lutherans and Calvinists, and one for Baptists; besides a public goal and a brick market-house.

HAGARS-TOWN.

Hagars-town is but little inferior to Frederick-town, and is situated in the beautiful and well-cultivated valley of Conego-cheague, and carries on a considerable trade with the western country.

ELKTON.

Elkton is situated near the head of Chesapeak bay, on a small river which bears the name of the town. It enjoys great advantages from the carrying-trade between Baltimore and Philadelphia, and the tides ebb and flow up to the town.

POPULATION.

In 1782 the number of inhabitants in this State, including slaves, was two hundred and fifty-four thousand and fifty. According to the census of 1790 it was as follows:

MARYLAND.

COUNTIES AND TOWNS.	Free white males of 16 years and upwards.	Free white males un- der 16 years.	Free white females.	All other free persons	Slaves.	Total.
Harford County,	2872	2812	5100	775	3417	14976
Baltimore do. -	5184	4668	9101	604	5877	25434
Baltimore Town and Precincts }	3866	2556	5503	323	1255	13503
Ann-Arundel county	3142	2850	5672	804	10130	22598
Frederick do. - -	7010	7016	12911	213	3641	30791
Allegany do. - -	1068	1283	2188	12	258	4809
Washington do. -	3738	3863	6871	64	1286	15822
Montgomery do. -	3284	2746	5649	294	6030	18003
Prince George do.	2652	2503	4848	164	11176	21344
Calvert do. - -	1091	1109	2011	136	430	8652
Charles do. - -	2565	2399	5160	404	10085	20613
St. Mary's do. - -	2100	1943	4173	343	6985	15544
Cecil do. - - -	2847	2377	4831	16	3407	13625
Kent do. - - -	1876	1547	3325	65	5433	12836
Queen Ann's do. -	2158	1974	4039	618	6674	15463
Caroline do. - -	1812	1727	3489	421	2057	9506
Talbot do. - - -	1938	1712	3531	1076	4777	13084
Somerset do. - -	2185	1908	4179	268	7070	15610
Dorchester do. -	2541	2430	5039	528	5337	15875
Worcester do. - -	1985	1916	3725	178	3836	11640
	55915	51339	101395	8043	103036	319728

By comparing these two accounts, the increase appears to be sixty-five thousand six hundred and seventy-eight in eight years, or eight thousand two hundred and six per annum—reckoning, therefore, only on the same proportion of increase, the present number of inhabitants in this State cannot be less than three hundred and fifty thousand.

RELIGION AND CHARACTER.

The Roman Catholics, who were the first settlers in Maryland, are the most numerous religious sect. Besides these, there are Protestant Episcopalians, English, Scotch, and Irish Presby-

terians, German Calvinists, German Lutherans, Friends, Baptists, Methodists, Menonists and Nicolites, or new Quakers, who all enjoy liberty of conscience.

There are many very respectable families in Baltimore who live genteelly, are hospitable to strangers, and maintain a friendly and improving intercourse with each other; but the bulk of the inhabitants, recently collected from almost all quarters of the world, bent on the pursuit of wealth, varying in their habits, their manners, and their religions, have yet their general character to form.

The inhabitants, except in the populous towns, live on their plantations, often several miles distant from each other. To an inhabitant of the middle, and especially of the eastern States, which are thickly populated, they appear to live very retired unsocial lives. The effects of this comparative solitude are visible in the countenances, as well as in the manners and dress of many of the country people. You observe comparatively little of that cheerful sprightliness of look and action, which is the invariable and genuine offspring of social intercourse; nor do you find that attention paid to dress which is common, and which custom has rendered necessary among people who are liable to receive company almost every day: unaccustomed, in a great measure, to frequent and friendly visits, they often suffer from much negligence in their dress. As the negroes perform all their manual labour, their masters are left to saunter away life in sloth, and too often in ignorance. These observations, however, must, in justice, be limited to the people in the country, and to those particularly whose poverty or parsimony prevents their spending a part of their time in populous towns, or otherwise mingling with the world; and with these limitations, they will equally apply to all the southern States. The inhabitants of the populous towns, and those from the country who have intercourse with them, are, in their manners and customs, genteel and agreeable.

That pride which grows on slavery, and is habitual to those who, from their infancy, are taught to believe and feel their superiority, is a visible characteristic of the inhabitants of Maryland; but with this characteristic we must not fail to connect that of hospitality to strangers, which is equally universal and obvious. Many of the women possess all the amiable, and many of the elegant accomplishments of their sex.

The inhabitants are made up of various nations of many different religious sentiments; few general observations, therefore, of a characteristical kind will apply: it may be said, how-

ever, with great truth, that they are in general very federal, and friends to good government. They owe little money as a State, and are willing and able to discharge their debts: their credit is very good; and although they have so great a proportion of slaves, yet a number of influential persons evinced their humanity and their disposition to abolish so cursed and disreputable a traffic, by forming themselves into "a society for the abolition of negro slavery." What pleasure must it afford these exalted characters, as well as every other friend of humanity, to reflect, that what they undertook as individuals, has been at length fully approved of, and completely accomplished by the federal government, who by an act that will reflect honour upon it to the latest period of time, have set bounds to the infamous distinction between men WHOSE ONLY REAL DIFFERENCE IS COLOUR, and who have secured, without injustice or injury to any individual, at an early period, the entire abolition of slavery in name and practice. We join the general wish of those whose object is the general happiness of the human race—that the spirit of philanthropic liberty in the breast of every individual in the Union, may second and cherish the efforts of the government in extending the knowledge and enjoyment of the rights of man to an hitherto enslaved world.

TRADE AND MANUFACTURES.

Furnaces for running iron ore into pigs and hollow ware, and forges to refine pig iron into bars, are numerous, and worked to great extent and profit. This is the only manufacture of importance carried on in the State, except it be that of wheat into flour and curing tobacco.

The trade of Maryland is principally carried on from Baltimore, with the other States; with the West-Indies, and with some parts of Europe. To these places they send annually about thirty thousand hogsheads of tobacco, besides large quantities of wheat, flour, pig iron, lumber, and corn; beans, pork, and flax seed in smaller quantities; and receive in return, clothing for themselves and negroes, and other dry goods, wines, spirits, sugars, and other West-India commodities. The balance is generally in their favour.

The total amount of exports from Baltimore	}	Dols.	Cts.
from Oct. 1, 1789, to Sept. 30, 1790, was			
Value of imports for the same time - - -		2,027,777	64
Exports from Oct. 1, 1790, to Sept. 30, 1791		1,945,899	55
		3,131,227	55

During the last mentioned period, the quantity of wheat exported was two hundred five thousand five hundred and seventy-one bushels; Indian corn, two hundred five thousand six hundred and forty-three ditto; buck wheat, four thousand two hundred and eighty-six ditto; peas, ten thousand six hundred and nineteen ditto; besides one hundred and fifty-one thousand four hundred and forty-five barrels of wheat flour; four thousand three hundred and twenty-five ditto, Indian meal; six thousand seven hundred and sixty-one ditto, bread; and three thousand one hundred and four kegs of crackers.

SEMINARIES OF LEARNING, &c.

Washington academy, in Somerset county, was instituted by law in 1779: it was founded, and is supported, by voluntary subscriptions, and private donations, and is authorized to receive gifts and legacies, and to hold two thousand acres of land. A supplement to the law, passed in 1784, increased the number of trustees from eleven to fifteen.

In 1782, a college was instituted at Charleston, in Kent county, and was honoured with the name of WASHINGTON COLLEGE, after President Washington. It is under the management of twenty-four visitors of governors, with power to supply vacancies and hold estates, whose yearly value shall not exceed six thousand pounds current money. By a law enacted in 1787, a permanent fund was granted to this institution of one thousand two hundred and fifty pounds a year, currency, out of the monies arising from marriage licences, fines, and forfeitures on the eastern shore.

St. John's college was instituted in 1785, to have also twenty-four trustees, with power to keep up the succession by supplying vacancies, and to receive an annual income of nine thousand pounds. A permanent fund is assigned this college, of one thousand seven hundred and fifty pounds a year, out of the monies arising from marriage licences, ordinary licences, fines and forfeitures, on the western shore. This college is at Annapolis, where a building has been prepared for it. Very liberal subscriptions have been obtained towards founding and carrying on these seminaries. The two colleges constitute one university, by the name of "the University of Maryland," whereof the governor of the State for the time being is chancellor, and the principal of one of them vice-chancellor, either by seniority or by election, as may hereafter be provided for by rule or by law. The chancellor is empowered to call a meeting of the

trustees, or a representation of seven of each, and two of the members of the faculty of each, the principal being one, which meeting is stiled, "The Convocation of the University of Maryland," who are to frame the laws, preserve uniformity of manners and literature in the colleges, confer the higher degrees, determine appeals, &c.

The Roman Catholics have also erected a college at Georgetown, on the Potomack river, for the promotion of general literature.

In 1785, the Methodists instituted a college at Abingdon, in Harford county, by the name of Cokesbury college, after Thomas Coke, and Francis Ashbury, *bishops* of the Methodist Episcopal Church. The college edifice is of brick, handsomely built on a healthy spot, enjoying a fine air, and a very extensive prospect.

The students, who are to consist of the sons of travelling preachers, of annual subscribers, of the members of the Methodist society and orphans; are instructed in English, Latin, Greek, Logic, Rhetoric, History, Geography, Natural Philosophy and Astronomy; and when the finances of the college will admit, they are to be taught the Hebrew, French, and German languages.

The college was erected and is supported wholly by subscription and voluntary donations.

The students have regular hours for rising, for prayers, for their meals, for study, and for recreation: they are all to be in bed precisely at nine o'clock. Their recreations, (for they are to be "indulged in nothing which the world calls *play*,") are gardening, walking, riding, and bathing, without doors; and within doors, the carpenters, joiners, cabinet-makers, or turner's business. Suitable provision is made for these several occupations, which are to be considered, not as matters of drudgery and constraint, but as pleasing and healthful recreations both for the body and mind. Another of their rules, which though new and singular, is favourable to the health and vigour of the body and mind, is, that the students shall not sleep on feather beds but on mattresses, and each one by himself. Particular attention is paid to the morals and religion of the students.

There are a few other literary institutions, of inferior note, in different parts of the State, and provision is made for free schools in most of the counties; though some are entirely neglected and very few carried on with any success: so that a great proportion of the lower class of people are ignorant; and there

are not a few who cannot write their names. But the revolution, among other happy effects, has roused the spirit of education, which is fast spreading its salutary influences over this and the other southern States.

CONSTITUTION.

DECLARATION OF RIGHTS.

The Parliament of Great-Britain, by a declaratory act, having assumed a right to make laws to bind the Colonies in all cases whatsoever, and in pursuance of such claim endeavoured by force of arms to subjugate the United Colonies to an unconditional submission to their will and power, and having at length constrained them to declare themselves independent States, and to assume government under the authority of the people: therefore, we, the delegates of Maryland, in free and full Convention assembled, taking into our most serious consideration the best means of establishing a good constitution in this State, for the sure foundation and more permanent security thereof, declare,

I. That all government of right originates from the people, is founded in compact only, and instituted solely for the good of the whole.

II. That the people of this State ought to have the sole and exclusive right of regulating the internal government and police thereof.

III. That the inhabitants of Maryland are entitled to the common law of England, and the trial by jury according to the course of that law, and to the benefit of such of the English statutes as existed at the time of their first emigration, and which by experience have been found applicable to their local and other circumstances, and of such others as have been since made in England, or Great-Britain, and have been introduced, used, and practised by the courts of law or equity: and also to all acts of Assembly in force on the first of June, seventeen hundred and seventy-four, except such as may have since expired, or have been, or may be altered by acts of Convention, or this Declaration of Rights; subject nevertheless to the revision of, and amendment or repeal by the legislature of this State; and the inhabitants of Maryland are also entitled to all property derived to them from or under the charter granted by his Majesty Charles I. to Cæcilius Calvert, Baron of Baltimore.

IV. That all persons invested with the legislative or executive powers of government are the trustees of the public, and as such accountable for their conduct: wherefore, whenever the ends of government are perverted, and public liberty manifestly endangered, and all other means of redress are ineffectual, the people may, and of right ought to reform the old, or establish a new government. The doctrine of non-resistance against arbitrary power and oppression is absurd, slavish, and destructive of the good and happiness of mankind.

V. That the right in the people to participate in the legislature is the best security of liberty, and the foundation of all free government. For this purpose, elections ought to be free and frequent, and every man having property in, a common interest with, and attachment to the community, ought to have a right of suffrage.

VI. That the legislative, executive, and judicial powers of government ought to be for ever separate and distinct from each other.

VII. That no power of suspending laws, or the execution of laws, unless by, or derived from the legislature, ought to be exercised or allowed.

VIII. That freedom of speech and debates, or proceedings in the legislature, ought not to be impeached in any other court of judicature.

IX. That a place for the meeting of the legislature ought to be fixed, the most convenient to the members thereof, and to the depository of public records; and the legislature ought not to be convened or held at any other place, but from evident necessity.

X. That for redress of grievances, and for amending, strengthening and preserving the laws, the legislature ought to be frequently convened.

XI. That every man hath a right to petition the legislature for the redress of grievances, in a peaceable and orderly manner.

XII. That no aid, charge, tax, fee or fees, ought to be set, rated, or levied under any pretence, without consent of the legislature.

XIII. That the levying taxes by the poll is grievous and oppressive and ought to be abolished; that paupers ought not to be assessed for the support of government; but every other

person in the State ought to contribute his proportion of public taxes for the support of government, according to his actual worth in real or personal property within the State; yet fines, duties, or taxes, may properly and justly be imposed or laid with a political view for the good government and benefit of the community.

XIV. That sanguinary laws ought to be avoided, as far as is consistent with the safety of the State; and no law to inflict cruel and unusual pains and penalties ought to be made in any case, or at any time hereafter.

XV. That retrospective laws, punishing facts committed before the existence of such laws, and by them only declared criminal, are oppressive unjust, and incompatible with liberty, wherefore no *ex post facto* law ought to be made.

XVI. That no law to attain particular persons of treason or felony ought to be made in any case, or at any time hereafter.

XVII. That every freemen, for any injury done him in his person or property, ought to have remedy by the course of the law of the land, and ought to have justice and right, freely without sale, fully without any denial, and speedily without delay, according to the law of the land.

XVIII. That the trial of facts where they arise, is one of the greatest securities of the lives, liberties, and estates of the people.

XIX. That in all criminal prosecutions, every man hath a right to be informed of the accusation against him, to have a copy of the indictment or charge in due time, if required, to prepare for his defence, to be allowed council, to be confronted with the witnesses against him, to have process for his witnesses, to examine the witnesses for and against him on oath, and to a speedy trial by an impartial jury, without whose unanimous consent he ought not to be found guilty.

XX. That no man ought to be compelled to give evidence against himself in a court of common law, or in any other court, but in such cases as have been usually practised in this State, or may hereafter be directed by the legislature.

XXI. That no freemen ought to be taken or imprisoned, or disseised of his freehold, liberties or privileges, or outlawed, or exiled, or in any manner destroyed, or deprived of his life, liberty, or property, but by the judgment of his peers, or by the law of the land.

XXII. That excessive bail ought not to be required, nor excessive fines imposed, nor cruel or unusual punishments inflicted by the courts of law.

XXIII. That all warrants without oath or affirmation, to search suspected places; or to seize any person or property, are grievous and oppressive; and all general warrants to search suspected places or to apprehend suspected persons, without naming or describing the place or the person in special, are illegal, and ought not to be granted.

XXIV. That there ought to be no forfeiture of any part of the estate of any person for any crime, except murder, or treason against the States, and then only on conviction and attainder.

XXV. That a well-regulated militia is the proper and natural defence of a free government.

XXVI. That standing armies are dangerous to liberty, and ought not to be raised or kept without consent of the legislature.

XXVII. That in all cases and at all times the military ought to be under strict subordination to, and controul of the civil power.

XXVIII. That no soldier ought to be quartered in any house in time of peace, without the consent of the owner; and in time of war, in such manner only as the legislature shall direct.

XXIX. That no person, except regular soldiers, mariners, and marines in the service of this State, or militia, when in actual service, ought in any case to be subject to, or punishable by martial law.

XXX. That the independency and uprightness of judges are essential to the impartial administration of justice, and a great security to the rights and liberties of the people; wherefore the chancellor and judges ought to hold their commissions during good behaviour; and the said chancellor and judges shall be removed for misbehaviour, on a conviction in a court of law, and may be removed by the governor, upon the address of the General Assembly, provided that two-thirds of all the members of each House concur in such address. That salaries liberal, but not profuse, ought to be secured to the chancellor and the judges during the continuance of their commissions, in such manner and at such times as the legislature shall hereafter direct, upon consideration of the circumstances of this State: no chancellor or judge ought to hold any other office, civil or military, or receive fees or perquisites of any kind.

XXXI. That a long continuance in the first executive departments of power or trust is dangerous to liberty; a rotation,

therefore, in those departments, is one of the best securities of permanent freedom.

XXXII. That no person ought to hold at the same time more than one office of profit, nor ought any person in public trust to receive any present from any foreign prince or state, or from the United States, or any of them, without the approbation of this State.

XXXIII. That as it is the duty of every man to worship God in such manner as he thinks most acceptable to him, all persons professing the Christian religion are equally entitled to protection in their religious liberty; wherefore no person ought by any law to be molested in his person or estate, on account of his religious persuasion or profession, or for his religious practice, unless, under colour of religion, any man shall disturb the good order, peace, or safety of the State, or shall infringe the laws of morality, or injure others in their natural, civil, or religious rights; nor ought any person to be compelled to frequent, or maintain, or contribute, unless on contract, to maintain any particular place of worship, or any particular ministry: yet the legislature may in their discretion lay a general and equal tax for the support of the Christian religion; leaving to each individual the power of appointing the payment of the money collected from him, to the support of any particular place of worship or minister, or for the benefit of the poor of his own denomination, or the poor in general of any particular county; but the churches, chapels, glebes, and all the property now belonging to the Church of England, ought to remain to the Church of England for ever. And all acts of Assembly lately passed for collecting monies for building or repairing particular churches or chapels of ease, shall continue in force and be executed, unless the legislature shall by act supersede or repeal the same; but no county court shall assess any quantity of tobacco or sum of money hereafter, on the application of any vestry-men, or churchwardens; and every incumbent of the Church of England who hath remained in his parish, and performed his duty, shall be entitled to receive the provision and support established by the act, entitled, "An act for the support of the clergy of the Church of England in this province," till the November court of this present year, to be held for the county in which his parish shall lie, or partly lie, for such time as he hath remained in his parish, and performed his duty.

XXXIV. That every gift, sale or devise of lands to any minister, public teacher, or preacher of the gospel, as such, or to

any religious sect, order, or denomination, or to, or for the support, use, or benefit of, or in trust for any minister, public teacher, or preacher of the gospel, as such, or any religious sect, order, or denomination; and every gift or sale of goods or chattels to go in succession, or to take place after the death of the seller or donor, or to or for such support, use or benefit; and also every devise of goods or chattels to, or for the support, use or benefit of any minister, public teacher, or preacher of the gospel, as such, or any religious sect, order or denomination, without the leave of the legislature, shall be void; except always any sale, gift, lease or devise of any quantity of land not exceeding two acres, for a church, meeting, or other house of worship, and for a burying ground, which shall be improved, enjoyed, or used only for such purpose, or such sale, gift, lease, or devise, shall be void.

XXXV. That no other test or qualification ought to be required on admission to any office of trust or profit, than such oath of support and fidelity to this State, and such oath of office as shall be directed by this Convention, or the legislature of this State, and a declaration of a belief in the Christian religion.

XXXVI. That the manner of administering an oath to any person, ought to be such as those of the religious persuasion, profession, or denomination, of which such person is one, generally esteem the most effectual confirmation by the attestation of the Divine Being. And that the people called Quakers, those called Dunkers, and those called Menonists, holding it unlawful to take an oath on any occasion, ought to be allowed to make their solemn affirmation in the manner that Quakers have been heretofore allowed to affirm, and to be of the same avail as an oath in all such cases as the affirmation of Quakers hath been allowed and accepted within this State, instead of an oath. And farther, on such affirmation, warrants to search for stolen goods, or for the apprehension or commitment of offenders, ought to be granted, or security for the peace awarded; and Quakers, Dunkers, or Menonists, ought also, on their solemn affirmation as aforesaid, to be admitted as witnesses in all criminal cases not capital.

XXXVII. That the city of Annapolis ought to have all its rights, privileges, and benefits, agreeable to its charter, and the acts of Assembly confirming and regulating the same; subject nevertheless to such alterations as may be made by this Convention, or any future legislature.

XXXVIII. That the liberty of the press ought to be inviolably preserved.

XXXIX. That monopolies are odious, contrary to the spirit of a free government and the principles of commerce, and ought not to be suffered.

XL. That no title of nobility or hereditary honours ought to be granted in this State.

XLI. That the subsisting resolves of this and the several Conventions held for this colony, ought to be in force as laws, unless altered by this Convention, or the legislature of this State.

XLII. That this declaration of rights, or the form of government to be established by this Convention, or any part of either of them, ought not to be altered, changed or abolished by the legislature of this State, but in such manner as this Convention shall prescribe and direct.

FRAME OF GOVERNMENT.

I. That the legislature consist of two distinct branches, a Senate and a House of Delegates, which shall be styled, *THE GENERAL ASSEMBLY OF MARYLAND*.

II. That the House of Delegates shall be chosen in the following manner: all freemen above twenty-one years of age, having a freehold of fifty acres of land in the county in which they offer to vote, and residing therein; and all freemen having property in this State above the value of thirty pounds current money, and having resided in the county in which they offer to vote, one whole year next preceding the election, shall have a right of suffrage in the election of delegates for such county; and all freemen so qualified shall, on the first Monday of October, seventeen hundred and seventy-seven, and on the same day in every year thereafter, assemble in the counties in which they are respectively qualified to vote, at the court-house in the said counties, or at such other place as the legislature shall direct, and when assembled, they shall proceed to elect, *viâ voce*, four delegates for their respective counties, of the most wise, sensible, and discreet of the people, residents in the county where they are to be chosen one whole year next preceding the election, above twenty-one years of age, and having in the State real or personal property above the value of five hundred pounds current money; and upon the final casting of the polls, the four persons who shall appear to have the greatest number of legal votes, shall be declared and returned duly elected for their respective counties.

III. That the sheriff of each county, or, in case of sickness, his deputy, summoning two justices of the county, who are required

to attend for the preservation of the peace, shall be the judge of the election, and may adjourn from day to day, if necessary, till the same be finished, so that the whole election shall be concluded in four days, and shall make his return thereof, under his hand, to the chancellor of this State for the time being.

IV. That all persons qualified by the charter of the city of Annapolis to vote for burgeses, shall on the same first Monday of October, seventeen hundred and seventy-seven, and on the same day in every year for ever thereafter, elect *viva voce*, by a majority of votes, two delegates, qualified agreeable to the said charter; that the mayor, recorder, and aldermen of the said city, or any three of them, be judges of the election, appoint the place in the said city for holding the same, and may adjourn from day to day as aforesaid, and shall make return thereof as aforesaid; but the inhabitants of the said city shall not be entitled to vote for delegates for Ann-Arundel county, unless they have a freehold of fifty acres of land in the county, distinct from the city.

V. That all persons, inhabitants of Baltimore town, and having the same qualifications as electors in the county, shall on the same first Monday in October, seventeen hundred and seventy-seven, and the same day in every year forever thereafter, at such place in the said town as the judges shall appoint, elect *viva voce*, by a majority of votes, two delegates, qualified as aforesaid; but if the said inhabitants of the town shall so decrease, as that the number of persons having a right of suffrage therein, shall have been for the space of seven years successively, less than one half the number of voters in some one county in this State, such town thenceforward shall cease to send two delegates or representatives to the House of Delegates, until the said town shall have one half of the number of voters in some one county in this State.

VI. That the commissioners of the said town, or any three or more of them, for the time being, shall be judges of the said election, and may adjourn as aforesaid, and shall make return thereof as aforesaid; but the inhabitants of the said town shall not be entitled to vote for, or be elected delegates for Baltimore county; neither shall the inhabitants of Baltimore county, out of the limits of Baltimore town, be entitled to vote for, or be elected delegates for the said town.

VII. That on refusal, death, disqualification, resignation or

removal out of this State, of any delegate, or on his becoming governor or member of the council, a warrant of election shall issue by the speaker, for the election of another in his place, of which ten days notice at least, excluding the day of notice and day of election, shall be given.

VIII. That not less than a majority of delegates, with their speaker, to be chosen by them by ballot, constitute an House for the transaction of any business, other than that of adjourning.

IX. That the House of Delegates shall judge of the elections and qualifications of delegates.

X. That the House of Delegates may originate all money bills, propose bills to the Senate, or receive those offered by that body, and assent, dissent, or propose amendments: that they may inquire, on the oath of witnesses, into all complaints, grievances, and offences, as the grand inquest of this State, and may commit any person for any crime to the public goal, there to remain till he be discharged by due course of law. They may expel any member for a great misdemeanor, but not a second time for the same cause. They may examine and pass all accounts of the State, relating either to the collection or expenditure of the revenue, or appoint auditors to state or adjust the same. They may call for all public or official papers and records, and send for persons whom they may judge necessary, in the course of their inquiries, concerning affairs relating to the public interest; and may direct all office bonds, which shall be made payable to the State, to be sued for on any breach of duty.

XI. That the Senate may be at full and perfect liberty to exercise their judgment in passing laws, and that they may not be compelled by the House of Delegates either to reject a money bill which the emergency of affairs may require, or to assent to some other act of legislation, in their conscience and judgment injurious to the public welfare, the House of Delegates shall not, on any occasion, or under any pretence annex to, or blend with a money bill, any matter, clause, or thing, not immediately relating to, and necessary for the imposing, assessing, levying, or applying the taxes or supplies to be raised for the support of government, or the current expenses of the State: and to prevent altercation about such bills, it is declared, that no bill imposing duties or customs for the mere regulation of commerce, or inflicting fines for the reformation of morals, or

to enforce the execution of the laws, by which an incidental revenue may arise, shall be accounted a money bill; but every bill assessing, levying or applying taxes or supplies for the support of government, or the current expenses of the State, or appropriating money in the treasury, shall be deemed a money bill.

XII. That the House of Delegates may punish, by imprisonment, any person who shall be guilty of a contempt in their view, by any disorderly or riotous behaviour, or by threats to or abuse of their members, or by any obstruction to their proceedings. They may also punish, by imprisonment, any person who shall be guilty of a breach of privilege, by arresting on civil process, or by assaulting any of their members during their sitting, or on their way to, or return from the House of Delegates; or by any assault of, or obstruction to their officers, in the execution of any order or process; or by assaulting or obstructing any witness, or any other person, attending on, or on their way to, or from the House; or by rescuing any person committed by the House, and the senate may exercise the same power in similar cases.

XIII. That the treasurers (one for the western and another for the eastern shore) and the commissioners of the Loan Office, may be appointed by the House of Delegates during their pleasure and in case of refusal, death, resignation, disqualification, or removal out of the State, of any of the said commissioners or treasurers, in the recess of the General Assembly, the governor, with the advice of the council, may appoint and commission a fit and proper person to such vacant office, and to hold the same until the Meeting of the next General Assembly.

XIV. That the senate be chosen in the following manner:— All persons, qualified as aforesaid to vote for county delegates, shall, on the first day of September, 1781, and on the same day in every fifth year for ever thereafter, elect *viva voce*, by a majority of votes, two persons for their respectively counties, qualified as aforesaid to be elected county delegates, to be electors of the senate; and the sheriff of each county, or, in case of sickness, his deputy, (summoning two justices of the county, who are required to attend for the preservation of the peace) shall hold and be judge of the said election, and make return thereof as aforesaid. And all persons qualified as aforesaid to vote for delegates for the city of Annapolis and Baltimore town, shall, on the same first Monday of September, 1781,

and on the same day in every fifth year for ever thereafter, elect, *vivâ voce*, by a majority of votes, one person for the said city and town respectively, qualified as aforesaid, to be elected a delegate for the said city and town respectively; the said election to be held in the same manner as the election of delegate for the said city and town; the right to elect the said elector with respect to Baltimore town to continue as long as the right to elect delegates for the said town.

XV. That the said electors of the senate meet at the city of Annapolis, or such other place as shall be appointed for convening the legislature, on the third Monday in September, 1781, and on the same day in every fifth year for ever thereafter, and they, or any twenty-four of them so met, shall proceed to elect by ballot, either out of their own body, or the people at large, fifteen senators, (nine of whom to be residents on the western, and six to be residents on the eastern shore) men of the most wisdom, experience and virtue, above twenty-five years of age, residents of the State above three whole years next preceding the election, and having real and personal property above the value of one thousand pounds current money.

XVI. That the senators shall be balloted for at one and the same time; and out of the Gentlemen residents of the western shore who shall be proposed as senators, the nine who shall, on striking the ballots, appear to have the greatest number in their favour, shall be accordingly declared and returned duly elected; and out of the gentlemen residents of the eastern shore who shall be proposed as senators, the six who shall, on striking the ballots, appear to have the greatest number in their favour, shall be accordingly declared and returned duly elected: and if two or more, on the same shore, shall have an equal number of ballots in their favour, by which the choice shall not be determined on the first ballot, then the electors shall again ballot before they separate, in which they shall be confined to the persons who, on the first ballot, shall have had an equal number; and they who shall have the greatest number in their favour on the second ballot, shall be accordingly declared and returned duly elected; and if the whole number should not thus be made up, because of an equal number on the second ballot still being in favour of two or more persons, then the election shall be determined by lot between those who have equal numbers; which proceedings of the electors shall be certified under their hands, and returned to the chancellor for the time being.

XVII. That the electors of senators shall judge of the qualifications and elections of members of their body, and on a contested election shall admit to a seat, as an elector, such qualified person as shall appear to them to have the greatest number of legal votes in his favour.

XVIII. That the electors immediately on their meeting, and before they proceed to the election of senators, take such oath of support and fidelity to this State, as this Convention or the legislature shall direct; and also an oath, "to elect, without favour, affection, partiality or prejudice, such persons for senators as they, in their judgment and conscience, believe best qualified for the office."

XIX. That in case of refusal, death, resignation, disqualification, or removal out of this State, of any senator, or on his becoming governor, or a member of the council, the senate shall immediately thereupon, or at their next meeting thereafter, elect by ballot, in the same manner as the electors are above directed to chuse senators, another person in his place for the residue of the said term of five years.

XX. That not less than a majority of the senate, with their president (to be chosen by them by ballot) shall constitute an House for the transacting any business, other than that of adjourning.

XXI. That the senate shall judge of the elections and qualifications of senators.

XXII. That the senate may originate any other except money bills, to which their assent or dissent only shall be given; and may receive any other bills from the House of Delegates, and assent, dissent or propose amendments.

XXIII. That the General Assembly meet annually, on the first Monday of November, and if necessary oftener.

XXIV. That each House shall appoint its own officers, and settle its own rules of proceeding.

XXV. That a person of wisdom, experience, and virtue, shall be chosen governor, on the second Monday of November, seventeen hundred and seventy-seven, and on the second Monday in every year for ever thereafter, by the joint ballot of both Houses, to be taken in each House respectively, deposited in a conference-room; the boxes to be examined by a joint committee of both Houses, and the numbers severally reported, that the appointment may be entered; which mode of taking the joint ballot of both Houses shall be adopted in all cases. But if two or more shall have an equal number of ballots in their

favour, by which the choice shall not be determined on the first ballot, then a second ballot shall be taken, which shall be confined to the persons who on the first ballot shall have had an equal number; and if the ballots should again be equal between two or more persons, then the election of the governor shall be determined by lot, between those who have equal numbers; and if the person chosen governor shall die, resign, remove out of the State, or refuse to act (sitting the General Assembly) the Senate and House of Delegates shall immediately thereupon proceed to a new choice in manner aforesaid.

XXVI. That the senators and delegates, on the second Tuesday of November, one thousand seven hundred and seventy-seven, and annually on the second Tuesday of November for ever thereafter, elect by joint ballot, in the same manner as senators are directed to be chosen, five of the most sensible, discreet and experienced men, above twenty-five years of age, residents in the State above three years next preceding the election, and having therein a freehold of lands and tenements above the value of one thousand pounds current money, to be the council to the governor; whose proceedings shall be always entered on record, to any part whereof any member may enter his dissent; and their advice, if so required by the governor or any member of the council, shall be given in writing, and signed by the members giving the same respectively; which proceedings of the council shall be laid before the Senate or House of Delegates, when called for by them, or either of them. The council may appoint their own clerk, who shall take such oath of support and fidelity to this State as this Convention or the legislature shall direct, and of secrecy, in such matters as he shall be directed by the Board to keep secret.

XXVII. That the delegates to Congress from this State shall be chosen annually, or superseded in the mean time by the joint ballot of both Houses of Assembly, and that there be a rotation in such manner that at least two of the number be annually changed; and no person shall be capable of being a delegate to Congress for more than three in any term of six years; and no person who holds any office of profit in the gift of Congress shall be eligible to sit in Congress, but if appointed to any such office his seat shall be thereby vacated. That no person unless above twenty-one years of age and a resident in the State more than five years next preceding the election, and having real and personal estate in this State above the value of one thousand pounds current money, shall be eligible to sit in Congress.

XXVIII. That the senators and delegates, immediately on their annual meeting, and before they proceed to any business, and every person hereafter elected a senator or delegate, before he acts as such, shall take an oath of support and fidelity to this State as aforesaid; and before the election of a governor, or member of the council, shall take an oath, "to elect without favour, affection, partiality or prejudice, such person as governor, or member of the council, as they in their judgment and conscience believe best qualified for the office."

XXIX. That the senate and delegates may adjourn themselves respectively: but if the two Houses should not agree on the same time, but adjourn to different days, then shall the governor appoint and notify one of those days, or some day between, and the Assembly shall then meet and be held accordingly; and he shall, if necessary, by advice of the council, call them before the time to which they shall in any manner be adjourned, on giving not less than ten days notice thereof; but the governor shall not adjourn the Assembly otherwise than as aforesaid, nor prorogue or dissolve it at any time.

XXX. That no person, unless above twenty-five years of age, a resident in this State above five years next preceding the election, and having in the State real and personal property above the value of five thousand pounds current money, one thousand pounds whereof at least to be freehold estate, shall be eligible as governor.

XXXI. That the governor shall not continue in that office longer than three years successively, nor be eligible as governor until the expiration of four years after he shall have been out of that office.

XXXII. That upon the death, resignation, or removal out of this State, of the governor, the first named of the council, for the time being, shall act as governor, and qualify in the same manner; and shall immediately call a meeting of the General Assembly, giving not less than fourteen days notice of the meeting, at which meeting a governor shall be appointed, in manner aforesaid, for the residue of the year.

XXXIII. That the governor, by and with the advice and consent of the council, may embody the militia, and when embodied shall alone have the direction thereof, and shall also have the direction of all the regular land and sea forces under the laws of this State; but he shall not command in person, unless advised thereto by the council, and then only so long as they

shall approve thereof; and may alone exercise all other the executive powers of government, where the concurrence of the council is not required, according to the laws of this State; and grant reprieves or pardons for any crime, except in such cases where the law shall otherwise direct; and may, during the recess of the General Assembly, lay embargoes to prevent the departure of any shipping, or the exportation of any commodities, for any time not exceeding thirty days in any one year, summoning the General Assembly to meet within the time of the continuance of such embargo; and may also order and compel any vessel to ride quarantine, if such vessel, or the port from which she may have come, shall, on strong grounds, be suspected to be infected with the plague; but the governor shall not, on any pretence, exercise any power or prerogative by virtue of any law, statute or custom, of England or Great-Britain.

XXXIV. That the members of the council, or any three or more of them, when convened, shall constitute a Board for the transacting of business. That the governor for the time being shall preside in the council, and be entitled to a vote on all questions in which the council shall be divided in opinion; and in the absence of the governor, the first named of the council shall preside, and as such shall also vote in all cases where the other members disagree in their opinion.

XXXV. That in case of refusal, death, resignation, disqualification, or removal out of the State, of any person chosen a member of the council, the members thereof, immediately thereupon, or at their next meeting thereafter, shall elect, by ballot, another person qualified as aforesaid, in his place, for the residue of the year.

XXXVI. That the council shall have power to make the great seal of this State, which shall be kept by the chancellor for the time being, and affixed to all laws, commissions, grants and other public testimonials, as has been heretofore practised in this State.

XXXVII. That no senator, delegate of Assembly, or member of the council, if he shall qualify as such, shall hold or execute any office of profit, or receive the profits of any office exercised by any other person, during the time for which he shall be elected; nor shall any governor be capable of holding any other office of profit in this State, while he act as such; and no person holding a place of profit, or receiving any part of the profits thereof, or receiving the profits, or any part of the profits, arising on any agency for the supply of cloathing

or provisions for the army or navy, or holding any office under the United States, or any of them, or a minister or preacher of the gospel of any denomination, or any person employed in the regular land service, or marine, of this or the United States, shall have a seat in the General Assembly, or the council of this State.

XXXVIII. That every governor, senator, delegate to Congress or Assembly, and member of the council, before he acts as such, shall take an oath, "That he will not receive, directly or indirectly, at any time, any part of the profits of any office held by any other person during his acting in his office of governor, senator, delegate to Congress or Assembly, or member of the council, or the profits, or any part of the profits, arising on any agency for the supply of cloathing or provisions for the army or navy."

XXXIX. That if any senator, delegate to Congress or Assembly, or member of the council, shall hold or execute any office of profit, or receive, directly or indirectly, at any time, the profits, or any part of the profits, of any office exercised by any other person, during his acting as senator, delegate to Congress or Assembly, or member of the council, his seat, on conviction in a court of law, by the oath of two credible witnesses, shall be void, and he shall suffer the punishment for wilful and corrupt perjury, or be banished this State for ever, or disqualified for ever from holding any office or place of trust or profit, as the court may judge.

XL. That the chancellor, all judges, the attorney-general, clerks of the General Court, the clerks of the county courts, the registers of the land office, and registers of wills, shall hold their commissions during good behaviour, removeable only for misbehaviour, on conviction in a court of law.

XLI. That there be a register of wills appointed for each county, who shall be commissioned by the governor, on the joint recommendation of the Senate and House of Delegates; and that upon the death, resignation, disqualification, or removal out of the county, by any register of wills, in the recess of the General Assembly, the governor, with the advice of the council may appoint and commission a fit and proper person to such vacant office, to hold the same until the meeting of the General Assembly.

XLII. That sheriffs shall be elected in each county, by ballot, every third year, that is to say, two persons for the office of sheriff for each county, the one of whom having

the majority of votes, or if both have an equal number either of them, at the discretion of the governor, to be commissioned by the governor for the said office, and having served for three years, such person shall be ineligible for the four years next succeeding, bond with security to be taken every year as usual, and no sheriff shall be qualified to act before the same is given. In case of death, refusal, resignation, disqualification, or removal out of the county, before the expiration of the three years, the other person, chosen as aforesaid, shall be commissioned by the governor to execute the said office for the residue of the said three years, the said person giving bond with security as aforesaid: and in case of his death, refusal, resignation, disqualification, or removal out of the county, before the expiration of the said three years, the governor, with the advice of the council, may nominate and commission a fit and proper person to execute the said office for the residue of the said three years, the said person giving bond and security as aforesaid. The election shall be held at the same time and place appointed for the election of delegates: and the justices there summoned to attend for the preservation of the peace, shall be judges thereof, and of the qualification of candidates, who shall appoint a clerk to take the ballots. All freemen above the age of twenty-one years, having a freehold of fifty acres of land in the county in which they offer to ballot, and residing therein; and all freemen above the age of twenty-one years, and having property in the State above the value of thirty pounds current money, and having resided in the county in which they offer to ballot, one whole year next preceding the election, shall have a right of suffrage; no person to be eligible to the office of sheriff for a county, but an inhabitant of the said county above the age of twenty-one years, and having real and personal property in the State above the value of one thousand pounds current money. The justices aforesaid shall examine the ballots, and the two candidates properly qualified, having in each county the majority of legal ballots, shall be declared duly elected for the office of sheriff for such county, and returned to the governor and council, with a certificate of the number of ballots for each of them.

XLIII. That every person who shall offer to vote for delegates, or for the election of the senate, or for the sheriff, shall (if required by any three persons qualified to vote) before he be admitted to poll, take such oath or affirmation of support and fidelity to this State, as this Convention or the legislature shall direct.

XLIV. That a justice of the peace may be eligible as a senator, delegate, or member of the council, and may continue to act as a justice of the peace.

XLV. That no field officer of the militia be eligible as a senator, delegate, or member of the council.

XLVI. That all civil officers hereafter to be appointed for the several counties of this State, shall have been residents of the county respectively, for which they shall be appointed, six months next before their appointment, and shall continue residents of their county respectively, during their continuance in office.

XLVII. That the judges of the General Court, and justices of the county courts, may appoint the clerks of their respective courts, and in case of refusal, death, resignation, disqualification, or removal out of the county, of any of the said county clerks, in the vacation of the county court of which he is clerk, the governor, with the advice of the council, may appoint and commission a fit and proper person to such vacant office respectively, to hold the same until the meeting of the next General Court, or county court, as the case may be.

XLVIII. That the governor for the time being, with the advice and consent of the council, may appoint the chancellor, and all judges and justices, the attorney-general, naval officers, officers in the regular land and sea service, officers of the militia, registers of the land office, surveyors, and all other civil officers of government, (assessors, constables and overseers of the roads only excepted) and may also suspend or remove any civil officer who has not a commission during good behaviour; and may suspend any militia officer for one month; and may also suspend or remove any regular officer in the land or sea service; and the governor may remove or suspend any militia officer in pursuance of the judgment of a court martial.

XLIX. That all civil officers of the appointment of the governor and council, who do not hold commissions during good behaviour, shall be appointed annually in the third week of November; but if any of them shall be re-appointed, they may continue to act without any new commission or qualification; and every officer, though not re-appointed, shall continue to act until the person who shall be appointed and commissioned in his stead shall be qualified.

L. That the governor, every member of the council, and every judge and justice, before they act as such, shall respectively take an oath, "That he will not, through favour, affection or

partiality, vote for any person to office, and that he will vote for such person as in his judgment and conscience he believes most fit and best qualified for the office; and that he has not made, nor will make any promise or engagement to give his vote or interest in favour of any person."

LI. That there be two registers of the land office, one upon the western and one upon the eastern shore; that short extracts of the grant, and certificates of the land on the western and eastern shores respectively be made in separate books, at the public expense, and deposited in the offices of the said registers in such manner as shall hereafter be provided by the General Assembly.

LII. That every chancellor, judge, register of wills, commissioner of the loan office, attorney-general, sheriff, treasurer, naval officer, register of the land office, register of the chancery court and every clerk of the common law courts, surveyor, and auditor of the public accounts, before he acts as such, shall take an oath, "that he will not, directly or indirectly, receive any fee or reward for doing his office of but what is or shall be allowed by law: nor will directly or indirectly receive the profits, or any part of the profits of any office held by any other person: and that he does not hold the same office in trust, or for the benefit of any other person."

LIII. That if any governor, chancellor, judge, register of wills, attorney-general, register of the land office, register of the chancery court, or any clerk of the common law courts, treasurer, naval officers, sheriff, surveyor or auditor of public accounts, shall receive, directly or indirectly, at any time, the profits, or any part of the profits, of any office held by any other person, during his acting in the office to which he is appointed, his election, appointment and commission, on conviction in a court of law, by oath of two credible witnesses, shall be void, and he shall suffer the punishment for wilful and corrupt perjury, or be banished this State for ever, or disqualified for ever from holding any office or place of trust or profit, as the court may adjudge,

LIV. That if any person shall give any bribe, present or reward, or any promise, or any security for the payment or delivery of any money, or any other thing, to obtain or procure a vote to be governor, senator, Delegate to Congress or Assembly, member of the council, or judge, or to be appointed to any of the said offices, or to any office of profit or trust, now

created or hereafter to be created in this State; the person giving, and the person receiving the same, on conviction in a court of law, shall be for ever disqualified to hold any office of trust or profit in this State.

LV. That every person appointed to any office of profit or trust shall, before he enters on the execution thereof, take the following oath, to wit, "I A. B. do swear, That I do not hold myself bound in allegiance to the King of Great-Britain, and that I will be faithful, and bear true allegiance to the State of Maryland," and shall also subscribe a declaration of his belief in the Christian religion.

LVI. That there be a court of appeals, composed of persons of integrity and sound judgment in the law, whose judgment shall be final and conclusive in all cases of appeal from the General Court, Court of Chancery, and Court of Admiralty: that one person of integrity and sound judgment in the law be appointed chancellor: that three persons of integrity and sound judgment in the law be appointed judges of the court now called the Provincial Court; and that the same court be hereafter called and known by the name of THE GENERAL COURT; which court shall sit on the western and eastern shores for transacting and determining the business of the respective shores, at such times and places as the future legislature of this State shall direct and appoint.

LVII. That the stile of all laws runs thus, *Be it enacted, by the General Assembly of Maryland*; that all public commissions and grants run thus, *The State of Maryland, &c.* and shall be signed by the governor, and attested by the chancellor, with the seal of the State annexed, except military commissions, which shall not be attested by the chancellor, or have the seal of the State annexed: that all writs shall run in the same stile, and be tested, sealed and signed as usual: that all indictments shall conclude, *Against the Peace, Government, and Dignity of the State.*

LVIII. That all penalties and forfeitures, heretofore going to the King or proprietary, shall go to the State, save only such as the General Assembly may abolish or otherwise provide for.

LIX. That this Form of Government, and the Declaration of Rights, and no part thereof, shall be altered, changed or abolished, unless a bill so to alter, change or abolish the same, shall pass the General Assembly, and be published at least three months before a new election, and shall be confirmed by the General Assembly after a new election of delegates, in the first session after such new election: provided, that nothing in this Form

of Government which relates to the eastern shore particularly, shall at any time hereafter be altered, unless for the alteration and confirmation thereof at least two-thirds of all the members of each branch of the General Assembly shall concur.

LX. That every bill passed by the General Assembly, when engrossed, shall be presented by the speaker of the House of Delegates, in the senate, to the governor for the time being, who shall sign the same, and thereto affix the great seal, in the presence of the members of both Houses. Every law shall be recorded in the General Court-Office of the western shore, and in due time printed, published, and certified under the great seal, to the several county courts, in the same manner as hath been heretofore used in this State.

This Declaration of Rights and Frame of Government was assented to, and passed in Convention of the Delegates of the freemen of Maryland, begun and held at the city of Annapolis, the 14th of August, A. D. 1776.

EXPENSES OF GOVERNMENT AND TAXES.

The annual expenses of government are estimated at about twenty thousand pounds currency. The revenue arises chiefly from taxes on real and personal property.

CITY OF WASHINGTON,

IN THE TERRITORY OF COLUMBIA.

THE territory of Columbia was ceded to the United States by the States of Maryland and Virginia, for the purpose of establishing a federal city, that might become the permanent seat of the Federal Government. This city, now building, is called after the name of that brave defender of American liberty and supporter of the rights of mankind, GEORGE WASHINGTON, who having vindicated the rights of his countrymen, and contributed to the establishment of his country's independence, has been called by the voice of gratitude and affection to fill the highest office a generous and brave people had to bestow—this city will therefore stand as the most honourable monument of his worth and the people's gratitude that could possibly be erected; and we trust that when it becomes the seat of government, which it is to be after 1800, that it will recall to the minds of future legislators his virtues, and the principles on which American liberty is founded, and its government established. This city stands at the junction of the rivers Potomack and the Eastern Branch, in latitude $38^{\circ} 53'$ north, extending about four miles up each, including a tract of territory, exceeded in point of convenience, salubrity, and beauty, by none in America, if any in the world: for although the land is apparently level, yet by gentle and gradual swellings, a variety of elegant prospects are produced, while there is a sufficient descent to convey off the water occasioned by rain.

Within the limits of the city are twenty-five springs of excellent water; and by digging wells, water of the best quality is readily had; besides these, the streams that now run through that territory, are also to be collected for the use of the city.

The waters of Reedy branch and of Tiber creek may also be conveyed to the President's house; for the source of Tiber creek

is elevated about two hundred and thirty-six feet above the level of the tide in the said creek, and the perpendicular height of the ground on which the capital is to stand, is seventy-eight feet above the level of the tide in the same : the water of Tiber creek may, therefore, be conveyed to the capital, and after watering that part of the city, may be destined to other useful purposes.

The Eastern Branch is one of the safest and most commodious harbours in America, being sufficiently deep for the largest ships for about four miles above its mouth ; while the channel lies close along the edge of the city, and affords a large and capacious harbour.

The Potomack, although only navigable for small craft, for a considerable distance from its banks next to the city, excepting about half a mile above the junction of the rivers, will nevertheless afford a capacious summer harbour ; as an immense number of ships may ride in the great channel, opposite to and below the city.

The city, being situated upon the great post road, exactly equi-distant from the northern and southern extremities of the Union, and nearly so from the Atlantic ocean to the Ohio river, upon the best navigation, in the midst of the richest commercial territory in America, and commanding the most extensive internal resources, is by far the most eligible situation for the residence of Congress ; and as it is now pressing forward, by the public spirited enterprise of the people of the United States, and by foreigners, it will grow up with a degree of rapidity, hitherto unparalleled in the annals of cities, and will probably soon become the admiration of the world, and one of the principal emporiums of American commerce.

The inland navigation of the Potomack is so far advanced, that craft loaded with produce now come down that river and its several branches, from upwards of one hundred and eighty miles to the great falls, which are within fourteen miles of the new city. The canals at the great and little falls are nearly completed, and the locks in such forwardness, that in the course of the present year, the navigation will be entirely opened between tide water and the head branches of the Potomack, which will produce a communication by water between the city of Washington and the interior parts of Virginia and Maryland, by means of the Potomack, the Shannandoah, the South Branch, Opecan, cape Capon, Patterson's creek, Conococheague, and Monocacy, for upwards of two hundred miles, through one of the most healthy, pleasant, and fertile regions in

in America, producing, in vast abundance, tobacco of superior quality, hemp, Indian corn, wheat and other small grain, with fruit and vegetables peculiar to America, in vast abundance, and equal in quality to any in the United States.

The lands upon the Potomack above the city of Washington, all around it, and for sixty miles below, are high and dry, abounding with innumerable springs of excellent water, and are well covered with large timber of various kinds. A few miles below the city, upon the banks of the Potomack, are inexhaustible mountains of excellent free-stone, of the white and red Portland kinds, of which the public edifices in the city are now building. Above the city, also upon the banks of the river, are immense quantities of excellent coal, lime-stone, and marble, with blue slate of the best quality.

The founding of this city in such an eligible situation, and upon such a liberal and elegant plan, will by future generations be considered as a high proof of the judgment and wisdom of the present government of the United States, and whilst its name will keep fresh in mind to the end of time, the many virtues and amiable qualities of the President, the city itself will be a standing monument of their public spirit.

The plan of this city agreeably to the directions of the President of the United States, was designed and drawn by the celebrated Major L'Enfant, and is an inconceivable improvement upon all others, combining not only convenience, regularity, elegance of prospect, and a free circulation of air, but every thing grand and beautiful that can possibly be introduced into a city.

The city is divided into squares or grand divisions, by the streets running due north, south, east and west, which form the ground-work of the plan. However, from the capitol, the President's House, and some of the important areas in the city, run transverse avenues or diagonal streets, from one material object to another, which not only produce a variety of charming prospects, but remove that insipid sameness that renders some other great cities unpleasing. These great leading streets are all one hundred and sixty feet wide, including a pavement of ten feet, and a gravel walk of thirty feet planted with trees on each side, which will leave eighty feet of paved street for carriages. The rest of the streets are in general one hundred and ten feet wide, with a few only ninety feet, except North, South, and East Capitol streets, which are one hundred and sixty feet. The diagonal streets are named after the respective States composing the Union, while those running north and

South are, from the capitol eastward, named, East First Street, East Second Street, &c. and those west of it in the same manner called West First Street, West Second Street, &c. those running east and west are from the capitol northward named, North A Street, North B Street, &c. and those south of it are called South A Street, South B Street, &c.

The squares, or divisions of the city, have their numbers inserted in the plan, and amount to eleven hundred and fifty. The rectangular squares generally contain from three to six acres, and are divided into lots of from forty to eighty feet front, and their depth from about one hundred and ten to three hundred feet, according to the size of the square.

The irregular divisions produced by the diagonal streets are some of them small, but are generally invaluable situations. Their acute points are all to be cut off at forty feet, so that no house in the city will have an acute corner. The lots in these irregular squares will all turn at a right angle with the respective streets, although the backs of the houses upon them will not stand parallel to one another, which is a matter of little or no consequence.

By the rules declared and published by the President of the United States, for regulating the buildings within the city, all houses must be of stone or brick—their walls must be parallel to the streets, and either placed immediately upon them, or withdrawn therefrom at pleasure. The walls of all houses upon streets one hundred and sixty feet wide must be at least thirty feet high; but there is no obligation imposed to build or improve in any limited time.

The area for the capitol, or house for the legislative bodies, is situated upon the most beautiful eminence in the city, about a mile from the Eastern Branch, and not much more from the Potomack, commanding a full and complete view of every part of the city, as well as a considerable extent of the country around. The President's house will stand upon a rising ground, not far from the banks of the Potomack, possessing a delightful water prospect, together with a commanding view of the capitol, and some other material parts of the city.

Due south from the President's house, and due west from the capitol, run two great pleasure parks or malls, which intersect and terminate upon the banks of the Potomack, and are to be ornamented at the sides by a variety of elegant buildings, and houses for foreign ministers, &c.

Interspersed through the city, where the most material streets cross one another, are a variety of open areas, formed in vari-

ous regular figures, which in great cities are extremely useful and ornamental.

Fifteen of the best of these areas are to be appropriated to the different States composing the Union; not only to bear their respective names, but as proper places for them to erect statues, obelisks, or columns, to the memory of their favourite eminent men. Upon the small eminence, where a line due west from the capitol, and due south from the President's house would intersect, is to be erected an equestrian statue of GENERAL WASHINGTON. The building where Massachusetts and Georgia street meets, is intended for a *Marine Hospital*, with its gardens.

The area at the south end of East Eight Street is for the general exchange, and its public walks, &c.—The broad black line, which runs along part of North B street, and, separating, joins the Eastern Branch at two places, is a canal, which is to be eighty feet wide, and eight feet deep. The area, where South G street crosses the canal, is intended to contain a city hall, and a basin of water; there being a very large spring in the middle of it.

The area, at the junction of the rivers, is for a fort, magazines, and arsenals.

At the east end of East Capitol Street is to be a bridge, and the present ferry is at the lower end of Kentucky street, where the great road now crosses the Eastern Branch. The Tiber, which is the principal stream that passes through the city, is to be collected in a grand reservoir beside the capitol, from whence it will be carried in pipes to different parts of the city; while its surplus will fall down in beautiful cascades, through the public gardens west of the capitol into the canal. In various parts of the city, places are allotted for market houses, churches, colleges, theatres, &c. In order to execute the plan a true meridional line was drawn by celestial observation, which passes through the area intended for the capitol. This line was crossed by another, running due east and west, which passes through the same area. These lines were accurately measured, and made the basis on which the whole plan was executed. All the lines were ran by a transit instrument, and the acute angles determined by actual measurement, thus leaving nothing to the uncertainty of the compass.

The President of the United States in locating the seat of the city, prevailed upon the proprietors of the soil to cede a certain portion of the lots in every situation, to be sold by his direction, and the proceeds to be solely applied to the public buildings,

and other works of public utility within the city. This grant will produce about fifteen thousand lots, and will be sufficient, not only to erect the public buildings, but to dig the canal, conduct water through the city, and to pave and light the streets, which will save a heavy tax that arises in other cities, and consequently render the lots considerably more valuable.

The grants of money made by Virginia and Maryland being sufficient, few of the public lots were sold, till the 17th day of September, 1793, when the demand was considerable, as the monied men in Europe and America had turned their attention to this great national object.

At the close of the year 1792, most of the streets were run, and the squares divided into lots. The canal was partly dug, and the greatest part of the materials provided for the public buildings, which are entirely of free-stone polished, and are now carrying on with all possible expedition. Several private houses were erected, and a great many proprietors of lots were preparing to build. The city now makes a noble appearance, many of the public buildings being in great forwardness, or finished, and a great number of houses built. In the month of June last, eleven thousand artificers, besides labourers, were employed in the different works.

The public lots in the city of Washington open a large field for speculation in America, and there is every probability of their being run up to an enormous price, as the public buildings are advanced; for although lands in America, from their quantity, are less valuable than those in Britain, yet lots in cities generally sell high.

S T A T E O F
V I R G I N I A.

SITUATION, EXTENT, &c.

THIS State is situated between 0° and 8° west longitude from Philadelphia, and $36^{\circ} 30'$, and $40^{\circ} 30'$ north latitude. Its length is about four hundred and forty-six miles, and its breadth two hundred and twenty-four. It is bounded on the east by the Atlantic, on the north by a line of latitude, crossing the eastern shore through Watkins's Point, being about $37^{\circ} 57'$ north latitude; from thence by a straight line to Cinquac, near the mouth of the Potomack; thence by the Potomack, which is common to Virginia and Maryland, to the first fountain of its northern branch; thence by a meridian line, passing through that fountain till it intersects a line running east and west, in latitude $39^{\circ} 43' 42''$ which divides Maryland from Pennsylvania, which was marked by Messrs. Mason and Dixon; thence by that line, and a continuation of it westwardly to the completion of five degrees of longitude from the eastern boundary of Pennsylvania, in the same latitude, and thence by a meridian line to the Ohio; on the west by the Ohio and Mississippi, to latitude $36^{\circ} 30'$ north; and on the south by the line of latitude last-mentioned. By admeasurements through nearly the whole of this last line, and supplying the unmeasured parts from good data, the Atlantic and Mississippi are found in this latitude to be seven hundred and fifty-eight miles distant, equal to $13^{\circ} 38'$ of longitude, reckoning fifty-five miles and three thousand one hundred and forty-four feet to the degree. This being our comprehension of American longitude, that of their latitude, taken between this and Mason and Dixon's line is $3^{\circ} 13' 42''$, equal to about two hundred and twenty-three miles.

supposing a degree of a great circle to be sixty-nine miles, eight hundred and sixty-four feet as computed by Cassini. These boundaries include an area somewhat triangular, of one hundred and twenty-one thousand five hundred and twenty-five square miles, whereof, seventy-nine thousand six hundred and fifty lie westward of the Allegany mountains, and fifty-seven thousand and thirty-four westward of the meridian of the mouth of the Great Kanhawa. This State is therefore one third larger than the islands of Great-Britain and Ireland, which are reckoned at eighty-eight thousand three hundred and fifty-seven square miles.

These limits result from, 1st, The antient charters from the crown of England. 2d, The grant of Maryland to Lord Baltimore, and the subsequent determinations of the British court as to the extent of that grant. 3d, The grant of Pennsylvania to William Penn, and a compact been the General Assemblies of the Commonwealth of Virginia and Pennsylvania as to the extent of that grant. 4th, The grant of Carolina, and actual location of its northern boundary, by consent of both parties. 5th, The treaty of Paris of 1763. 6th, The confirmation of the charters of the neighbouring States by the Convention of Virginia at the time of constituting their Commonwealth. 7th, The cession made by Virginia to Congress of all the lands to which they had title on the north side of the Ohio.

C L I M A T E.

In an extensive country, it will be expected that the climate is not the same in all its parts. It is remarkable that, proceeding on the same parallel of latitude westerly, the climate becomes colder in like manner as when you proceed northwardly. This continues to be the case till you attain the summit of the Allegany, which is the highest land between the ocean and the Mississippi. From thence, descending in the same latitude to the Mississippi, the change reverses; and, if we may believe travellers, it becomes warmer there than it is in the same latitude on the sea side. Their testimony is strengthened by the vegetables and animals which subsist and multiply there naturally, and do not on the sea coast. Thus catalpas grow spontaneously on the Mississippi, as far as the latitude of 37° , and reeds as far as 38° . Parroquets even winter on the Scioto, in the 39^{th} degree of latitude.

The south-west winds, east of the mountains, are most predominant. Next to these, on the sea coast, the north-east, and at the mountains, the north-west winds prevail. The difference between these winds is very great. The north-east is loaded with vapour, insomuch that the salt manufacturers have found that their chrystals would not shoot while that blows; it occasions a distressing chill, and a heaviness and depression of the spirits. The north-west is dry, cooling, elastic, and animating. The east and south-east breezes come on generally in the afternoon. They have advanced into the country very sensibly within the memory of people now living. Mr. Jefferson reckons the extremes of heat and cold to be 98° above and 6° below 0, in Fahrenheit's thermometer.

That fluctuation between heat and cold, so destructive to fruit, in the spring season, prevails less in Virginia than in Pennsylvania; nor is the overflowing of the rivers in Virginia so extensive or so frequent at that season, as those of the New-England States; because the snows in the former do not lie accumulating all winter, to be dissolved all at once in the spring, as they do sometimes in the latter. In Virginia, below the mountains, snow seldom lies more than a day or two, and seldom a week; and the large rivers seldom freeze over. The fluctuation of weather, however, is sufficient to render the winters and springs very unwholesome, as the inhabitants during those seasons have to walk in almost perpetual mire.

The months of June and July, though often the hottest, are the most healthy in the year. The weather is then dry and less liable to change than in August and September, when the rain commences, and sudden variations take place.

On the sea coast, the land is low, generally within twelve feet of the level of the sea, intersected in all directions with salt creeks and rivers, the heads of which form swamps and marshes, and fenny ground, covered with water in wet seasons. The uncultivated lands are covered with large trees and thick underwood. The vicinity of the sea, and salt creeks and rivers, occasion a constant moisture and warmth of the atmosphere, so that although under the same latitude, one hundred or one hundred and fifty miles in the country, deep snows, and frozen rivers frequently happen, for a short season, yet here such occurrences are considered as phenomena; for these reasons, the trees are often in bloom as early as the last of February; from this period, however, till the end of April,

the inhabitants are incommoded by cold rains, piercing winds, and sharp frosts, which subject them to the inflammatory diseases, known here under the names of pleurisy and peripneumony.

FACE OF THE COUNTRY, MOUNTAINS, RIVERS, &c.

The whole country below the mountains, which are about one hundred and fifty, some say two hundred miles from the sea, is level, and seems from various appearances to have been once washed by the sea. The land between York and James rivers is very level, and its surface about forty feet above high water mark. It appears, from observation, to have arisen to its present height, at different periods far distant from each other, and that at these periods it was washed by the sea; for near York-town, where the banks are perpendicular, you first see a *stratum*, intermixed with small shells, resembling a mixture of clay and sand, and about five feet thick; on this lies horizontally, small white shells, cockle, clam, &c. an inch or two thick; then a body of earth similar to that first mentioned, eighteen inches thick; then a layer of shells and another body of earth; on this a layer of three feet of white shells mixed with sand, on which lay a body of oyster shells six feet thick, which are covered with earth to the surface. The oyster shells are so united by a very strong cement that they fall, only when undermined, and then in large bodies, from one to twenty tons weight. They have the appearance on the shore of large rocks.*

These appearances continue in a greater or less degree in the banks of James river, one hundred miles from the sea; the appearances then vary, and the banks are filled with sharks, teeth, bones of large and small fish petrified, and many other petrifications, some resembling the bones of land and other animals, and also vegetable substances. These appearances are not confined to the river banks, but are seen in various places in gullies at considerable distances from the rivers. In one part of the State for seventy miles in length, by sinking a well, your apparently come to the bottom of what was formerly a water-courie. And even as high up as Botetourt county, among the Allegany mountains, there is a tract of land, judged to be forty thousand acres, surrounded on every side by mountains, which is entirely

* General Lincoln.

covered with oyster and cockle shells, and, by some gullies, they appear to be of considerable depth. A plantation at Day's Point, on James river, of as many as one thousand acres, appears at a distance as if covered with snow, but on examination the white appearance is found to arise from a bed of clam shells, which by repeated plowing have become fine and mixed with the earth.

It is worthy notice, that the mountains in this State are not solitary and scattered confusedly over the face of the country; but commence at about one hundred and fifty miles from the sea coast, are disposed in ridges one behind another, running nearly parallel with the sea coast, though rather approaching it as they advance north-eastwardly. To the south-west, as the tract of country between the sea coast and the Mississippi becomes narrower, the mountains converge into a single ridge: which, as it approaches the gulph of Mexico, subsides into plain country, and gives rise to some of the waters of that gulph, and particularly to a river called Apalachicola, probably from the Apalachies, an Indian nation formerly residing on it. Hence the mountains giving rise to that river, and seen from its various parts, were called the Apalachian mountains, being in fact the end or termination only of the great ridges passing through the continent. European geographers, however, have extended the same north-wardly as far as the mountains extended; some giving it after their separation into different ridges, to the Blue Ridge, others to the North mountains, others to the Allegany, others to the Laurel Ridge, as may be seen in their different maps. But none of these ridges were ever known by that name to the inhabitants, either native or emigrant, but as they saw them so called in European maps. In the same direction generally are the veins of lime-stone, coal, and other minerals hitherto discovered; and so range the falls of the great rivers. But the courses of the great rivers are at right angles with these. James and the Potomack penetrate through all the ridges of mountains eastward of the Allegany, which is broken by no water-course. It is in fact the spine of the country between the Atlantic on one side, and the Mississippi and St. Lawrence on the other. The passage of the Potomack through the Blue Ridge is perhaps one of the most stupendous scenes in nature. You stand on a very high point of land. On your right comes up the Shenandoah, having ranged along the foot of the mountain an hundred miles to seek a vent; on your left approaches the Potomack, in quest of a passage also; in the

moment of their junction, they rush together against the mountain, rend it asunder, and pass off to the sea. The first glance of this scene hurries our senses into the opinion, that this earth has been created in time, that the mountains were formed first, that the rivers began to flow afterwards; that in this place particularly they have been dammed up by the Blue Ridge of mountains, and have formed an ocean which filled the whole valley; that continuing to rise, they have at length broken over at this spot, and have torn the mountain down from its summit to its base. The piles of rock on each hand, but particularly on the Shenandoah, the evident marks of their disruption and avulsion from their beds by the most powerful agents of nature, corroborate the impression; but the distant finishing which nature has given to the picture, is of a very different character. It is a true contrast to the fore ground; it is as placid and delightful, as that is wild and tremendous. For the mountain, being cloven asunder, presents to the eye, through the cleft, a small catch of smooth blue horizon, at an infinite distance, in the plain country, inviting you, as it were, from the riot and tumult roaring around, to pass through the breach and participate of the calm below. Here the eye ultimately composes itself: and that way too, the road actually leads. You cross the Potomack above the junction, pass along its side through the base of the mountain for three miles, its terrible precipices hanging in fragments over you, and within about twenty miles reach Frederick-town and the fine country round that. This scene is worth a voyage across the Atlantic. Yet here, as in the neighbourhood of the Natural Bridge, are people who have passed their lives within half a dozen miles, and have never been to survey those monuments of a war between rivers and mountains, which must have shaken the earth itself to its center. The height of the mountains has not yet been estimated with any degree of exactness. The Allegheny being the great ridge which divides the waters of the Atlantic from those of the Mississippi, its summit is doubtless more elevated above the ocean than that of any other mountain. But its relative height compared with the base on which it stands, is not so great as that of some others, the country rising behind the successive ridges like the steps of stairs. The mountains of the Blue Ridge, and there the peaks of Otter are thought to be of a greater height measured from their base than any others in Virginia and perhaps in North-America. From data, which may be found a tolerable conclusion, we

suppose the highest peak to be about four thousand feet perpendicular, which is not a fifth part of the height of the mountains of South-America, nor one third of the height which would be necessary in our latitude to preserve ice in the open air unmelted through the year. The ridge of mountains next beyond the Blue Ridge, called the North mountain, is of the greatest extent: for which reason they are named by the Indians the Endless mountains.

The Ouasioto mountains are fifty or sixty miles wide at the Gap. These mountains abound in coal, lime, and free-stone; the summits of them are generally covered with a good soil, and a variety of timber; and the low, intervale lands are rich and remarkably well watered.

An inspection of the map of Virginia will give a better idea of the geography of its rivers, than any description in writing. Their navigation, however, may be imperfectly noted.

Roanoke, so far as it lies within this State, is no where navigable but for canoes, or light batteaux; and even for these, in such detached parcels as to have prevented the inhabitants from availing themselves of it at all.

James river, and its waters, afford navigation as follows: the whole of Elizabeth river, the lowest of those which run into James river, is a harbour, and would contain upwards of three hundred ships. The channel is from one hundred and fifty to two hundred fathoms wide, and at common flood tide, affords eighteen feet water to Norfolk. The Strafford, a sixty gun ship, went there, lightening herself across the bar at Sowell's Point. The Fier Rodrigue, pierced for sixty-four guns, and carrying fifty, went there without lightening. Craney Island, at the mouth of this river, commands its channel tolerably well.

Nansemond river is navigable to Sleepy Hole, for vessels of two hundred and fifty tons: to Suffolk, for those of one hundred tons; and to Milner's for those of twenty-five. Pagan creek affords eight or ten feet water to Smithfield, which admits vessels of twenty tons. Chickahominy has at its mouth a bar on which is only twelve feet water at common flood tide. Vessels passing that, may go eight miles up the river; those of ten feet draught may go four miles farther, and those of six tons burthen twenty miles farther.

The Appamattox may be navigated as far as Broadways, by any vessel which has crossed Harrison's bar in James river; it

keeps eight or nine feet water a mile or two higher up to Fisher's bar, and four feet on that and upwards to Peterburgh, where all navigation ceases.

James river itself affords harbour for vessels of any size at Hampton road, but not in safety through the whole winter; and there is navigable water for them as far as Mulberry Island. A forty gun ship goes to James-town, and, lightening herself, may pass to Harrison's bar, on which there is only fifteen feet water. Vessels of two hundred and fifty tons may go to Warwick; those of one hundred and twenty-five go to Rocket's, a mile below Richmond; from thence is about seven feet water to Richmond; and about the center of the town, four feet and a half, where the navigation is interrupted by falls, which in a course of six miles descend about eighty feet perpendicular: above these it is resumed in canoes and batteaux, and is prosecuted safely and advantageously to within ten miles of the Blue Ridge; and even through the Blue Ridge a ton weight has been brought; and the expense would not be great, when compared with its object, to open a tolerable navigation up Jackson's river and Carpenter's creek, to within twenty-five miles of Howard's creek of Green Briar, both of which have then water enough to float vessels into the Great Kanhawa. In some future state of population, it is possible that its navigation may also be made to interlock with that of Potomak, and through that to communicate by a short portage with the Ohio. It is to be noted, that this river is called in the maps James river, only to its confluence with the Rivanna; thence to the Blue Ridge it is called the Fluvanna; and thence to its source, Jackson's river. But in common speech it is called James river to its source.

The Rivanna, a branch of James river, is navigable for canoes and batteaux to its intersection with the south-west mountains which is about twenty-two miles; and may easily be opened to navigation through those mountains, to its fork above Charlottesville.

York river, at York-town, affords the best harbour in the State for vessels of the largest size. The river there narrows to the width of a mile, and is contained within very high banks, close under which the vessels may ride. It holds four fathom water at high tide for twenty-five miles above York to the mouth of Poropotank, where the river is a mile and a half wide, and the channel only seventy-five fathom, and passing under a high bank.

At the confluence of Pamunkey and Mattapony it is reduced to three fathom depth, which continues up Pamunkey to Cumberland, where the width is one hundred yards, and up Mattapony to within two miles of Frazier's ferry, where it becomes two and a half fathom deep, and holds that about five miles. Pamunkey is then capable of navigation for loaded flats to Brockman's bridge, fifty miles above Hanover-town, and Mattapony to Downer's bridge, seventy miles above its mouth.

Piankatank, the little rivers making out of Mobjack bay, and those of the eastern shore, receive only very small vessels, and these can but enter them. Rappahannock affords four fathom water to Hobbe's Hole, and two fathoms from thence to Frederickburg, one hundred and ten miles.

The Potomack is seven and a half miles wide at the mouth; four and a half at Nomony bay; three at Aquia; one and a half at Hallooing point; one and a quarter at Alexandria. Its soundings are seven fathom at the mouth; five at St. George's island; four and a half at Lower Matchodic; three at Swan's point, and thence up to Alexandria; thence ten feet water to the falls, which are thirteen miles above Alexandria. The tides in the Potomack are not very strong, excepting after great rains, when the ebb is pretty strong, then there is little or no flood; and there is never more than four or five hours flood, except with long and strong south winds.

The distance from the capes of Virginia to the termination of the tide water in this river is above three hundred miles, and navigable for ships of the greatest burthen, nearly that distance. From thence this river, obstructed by four considerable falls, extends through a vast tract of inhabited country towards its source. These falls are, 1st, The Little Falls, three miles above tide water, in which distance there is a fall of thirty-six feet; 2d, The Great Falls, six miles higher, where is a fall of seventy-six feet in one mile and a quarter; 3d, The Seneca Falls, six miles above the former, which form short, irregular rapids, with a fall of about ten feet; and 4th, The Shenandoah Falls, sixty miles from the Seneca, where is a fall of about thirty feet in three miles: from which last, fort Cumberland is about one hundred and twenty miles distant. The obstructions which are opposed to the navigation above and between these falls are of little consequence.

Early in the year 1785, the legislatures of Virginia and Maryland passed acts to encourage opening the navigation of this river. It was estimated that the expense of the works would amount to fifty thousand pounds sterling, and ten years were allowed for their completion; but the president and directors of the incorporated company have since supposed that forty-five thousand pounds would be adequate to the operation, and that it would be accomplished in a shorter period than was stipulated. Their calculations are founded on the progress already made, and the summary mode established for enforcing the collection of the dividends, as the money may become necessary.

As soon as the proprietors shall begin to receive toll, they will doubtless find an ample compensation for their pecuniary advances. By an estimate made many years ago, it was calculated that the amount in the commencement would be at the rate of eleven thousand eight hundred and seventy-five pounds, Virginia currency, per annum. The toll must every year become more productive; as the quantity of articles for exportation will be augmented in a rapid ratio, with the increase of population and the extension of settlements. In the mean time the effect will be immediately seen in the agriculture of the interior country; for the multitude of horses now employed in carrying produce to market, will then be used altogether for the purposes of tillage. But in order to form just conceptions of the utility of this inland navigation, it would be requisite to notice the long rivers which empty into the Potomack, and even to take a survey of the geographical position of the western waters.

The Shenandoah, which empties just above the Blue mountains, may, according to report, be made navigable, at a trifling expense, more than one hundred and fifty miles from its confluence with the Potomack; and will receive and bear the produce of the richest part of the State. Commissioners have been appointed to form a plan, and to estimate the expense of opening the channel of this river, if on examination it should be found practicable. The South Branch, still higher, is navigable in its actual condition nearly or quite one hundred miles, through exceedingly fertile lands. Between these on the Virginia side are several smaller rivers, that may with ease be improved, so as to afford a passage for boats. On the Maryland side are the Monocacy, Antietam, and Conegocheague, some of which pass through the State of Maryland, and have their sources in Pennsylvania.

From fort Cumberland, or Wills' creek; one or two good waggon roads may be had, where the distance is from thirty-five to forty miles, to the Youghiogany, a large and navigable branch of the Monongahela, which last forms a junction with the Allegany at Fort Pitt.

But by passing farther up the Potomack than fort Cumberland, which may very easily be done, a portage by a good waggon road to Cheat river, another large branch of the Monongahela, can be obtained through a space which some say is twenty, others twenty-two, others twenty-five, and none more than thirty miles.

When arrived at either of these western waters, the navigation through that immense region is opened by a thousand directions, and to the lakes in several places by portages of less than ten miles; and by one portage, it is asserted, of not more than a single mile.

Notwithstanding it was sneeringly said by some foreigners, at the beginning of this undertaking, that the Americans were fond of engaging in splendid projects which they could never accomplish, yet it is hoped the success of this first essay towards improving their inland navigation, will rescue them from the reproach intended to have been fixed upon their national character, by the unmerited imputation.

The Great Kanhawa is a river of considerable note for the fertility of its land, and still more, as leading towards the head waters of James river. Nevertheless, it is doubtful whether its great and numerous rapids will admit a navigation, but at an expense to which it will require ages to render its inhabitants equal. The great obstacles begin at what are called the Great Falls, ninety miles above the mouth, below which are only five or six rapids, and these passable, with some difficulty, even at low water. From the falls to the mouth of Green Briar is one hundred miles, and thence to the lead mines one hundred and twenty. It is two hundred and eighty yards wide at its mouth.

The Little Kanhawa is one hundred and fifty yards wide at the mouth. It yields a navigation of ten miles only. Perhaps its northern branch, called Junius's creek, which interlocks with the western waters of Monongahela, may one day admit a shorter passage from the latter into the Ohio.

Besides the rivers we have now mentioned, there are many others of less note, nevertheless the State does not abound with good fish; sturgeon, shad and herring are the most plenty; perch, sheepshead, drum, rock fish, and trout, are common; besides these, they have oysters, crabs, shrimps, &c. in abundance. The springs in this State are almost innumerable. In Augusta there is a remarkable cascade, it bears the name of the Falling Spring. It is a water of James river, where it is called Jackson's river, rising in the warm spring mountains about twenty miles south-west of the warm spring, and flowing into that valley. About three quarters of a mile from its source it falls over a rock two hundred feet into the valley below. The sheet of water is broken in its breadth by the rock in two or three places, but not at all in its height. Between the sheet and rock, at the bottom, you may walk across dry. This cataract will bear no comparison with that of Niagara, as to the quantity of water composing it, the sheet being only twelve for fifteen feet wide above, and somewhat more spread below; but it is half as high again.

SOIL, PRODUCTIONS, &c.

The soil below the mountains seems to have acquired a character for goodness which it by no means deserves. Though not rich, it is well suited to the growth of tobacco and Indian corn, and parts of it for wheat. Good crops of cotton, flax and hemp are also raised; and in some counties they have plenty of cyder, and exquisite brandy, distilled from peaches, which grow in great abundance upon the numerous rivers of the Chesapeake.

The planters, before the war, paid their principal attention to the culture of tobacco, of which there used to be exported, generally, fifty-five thousand hogheads a year. Since the revolution they are turning their attention more to the cultivation of wheat, Indian corn, barley, flax and hemp. It is expected that this State will add the article of rice to the list of exports; as it is supposed a large body of swamp, in the easternmost counties, is capable of producing it.

Horned or neat cattle are bred in great numbers in the western counties of Virginia, as well as the States south of it, where they have an extensive range, and mild winters, without any permanent snows. They run at large, are not housed, and

multiply very fast. "In the lower parts of the State a disease prevails among the neat cattle which proves fatal to all that are not bred there. The oxen from the more northern States, which were employed at the siege of York-town, in October 1781, almost all died, sometimes forty of them in a night, and often suddenly dropped down dead in the roads. It is said that the seeds of this disease were brought from the Havannah to South Carolina or Georgia in some hides, and that the disease has made a progress northward to Virginia. Lord Dunmore imported some cattle from Rhode-Island, and kept them confined in a small pasture, near his seat, where no cattle had been for some years, and where they could not intermix with other cattle, and yet they soon died."

The gentlemen of this State being fond of pleasure, have taken much pains to raise a good breed of horses, and have succeeded in it beyond any of the other States in the Union. They will give one thousand pounds sterling for a good seed horse. Horse-racing has had a great tendency to encourage the breeding of good horses, as it affords an opportunity of putting them to the trial of their speed. They are more elegant, and will perform more service than the horses of the northern States.

With respect to the subterraneous productions, Virginia is the most pregnant with minerals and fossils of any State in the Union. Mr. Jefferson mentions a lump of gold ore of about four pounds weight found near the falls of Rappahanock river, which yielded seventeen penny-weights of gold, of extraordinary ductility; but no other indication of gold has been discovered in its neighbourhood.

On the great Kanhawa, opposite to the mouth of Cripple creek, and also about twenty-five miles from the southern boundary of the State, in the county of Montgomery, are mines of lead. The metal is mixed, sometimes with earth, and sometimes with rock, which requires the force of gunpowder to open it; and is accompanied with a portion of silver, but too small to be worth separation under any process hitherto attempted there. The proportion yielded is from fifty to eighty pounds of pure lead from an hundred pounds of washed ore. The most common is that of sixty to the hundred pounds. The veins are sometimes most flattering; at others they disappear suddenly and totally. They enter the side of the hill, and proceed horizontally. Two of them have been wrought by the pub-

lic. These would employ about fifty labourers to advantage. Thirty men, who have at the same time raised their own corn, have produced sixty tons of lead in the year; but the general quantity is from twenty to twenty-five tons. The present furnace is a mile from the ore bank and on the opposite side of the river. The ore is first waggoned to the river, a quarter of a mile, then laden on board of canoes and carried across the river, which is there about two hundred yards wide, and then again taken into waggons and carried to the furnace. This mode was originally adopted, that they might avail themselves of a good situation on a creek, for a pounding mill; but it would be easy to have the furnace and pounding mill on the same side of the river, which would yield water, without any dam, by a canal of about half a mile in length. From the furnace the lead is transported one hundred and thirty miles along a good road, leading through the peaks of Otter to Lynch's Ferry, or Winston's, on James river, from whence it is carried by water about the same distance to Westham. This land carriage may be greatly shortened, by delivering the lead on James river, above the Blue Ridge, from whence a ton weight has been brought in two canoes. The great Kanhawa has considerable falls in the neighbourhood of the mines. About seven miles below are three falls, of three or four feet perpendicular each; and three miles above is a rapid of three miles continuance, which has been compared in its descent to the great fall of James river; yet it is the opinion, that they may be laid open for useful navigation, so as to reduce very much the portage between the Kanhawa and James river.

A valuable lead mine is said to have been discovered in Cumberland, below the mouth of Red river. The greatest, however, known in the western country are on the Mississippi, extended from the mouth of Rock river an hundred and fifty miles upwards. These are not wrought, the lead used in that country being from the banks on the Spanish side of the Mississippi, opposite to Kaskaskia.

A mine of copper was opened in the county of Amherst, on the north side of James river, and another in the opposite county, on the south side. However, either from bad management or the poverty of the veins, they were discontinued. There are several iron mines in this State; a few years ago there were six worked; two furnaces made about one hundred and fifty tons of bar iron each; four others made each from

six hundred to one thousand six hundred tons of pig iron annually. Besides these, a forge at Fredericksburgh made about three hundred tons a year of bar iron, from pigs imported from Maryland; and a forge on Neapscot of Potomack worked in the same way. The indications of iron in other places are numerous, and dispersed through all the middle country. The toughness of the cast iron of some of the furnaces is very remarkable. Pots and other utensils, cast thinner than usual, of this iron, may be safely thrown into or out of the waggons in which they are transported. Salt pans made of the same, and no longer wanted for that purpose, cannot be broken up in order to be melted again, unless previously drilled in many parts.

In the western part of the State, we are informed, there are likewise iron mines on Chesnut creek, a branch of the great Kanhawa, near where it crosses the Carolina line; and in other places.

Considerable quantities of black lead are taken occasionally for use from Winterham, in the county of Amelia. There is no work established at it, those who want go and procure it for themselves.

The country on both sides of James river, from fifteen to twenty miles above Richmond, and for several miles northward and southward is replete with mineral coal of a very excellent quality. Being in the hands of many proprietors, pits have been opened and worked to an extent equal to the demand. The pits which have been opened lie one hundred and fifty or two hundred feet above the bed of the river, and have been very little incommoded with water. The first discovery of the coal is said to have been made by a boy digging after a cray-fish; it has also been found on the bottom of trees blown up. In many places it lies within three or four feet of the surface of the ground. It is conjectured, that five hundred thousand bushels might be raised from one pit in twelve months.

In the western country, coal is known to be in so many places, as to have induced an opinion, that the whole tract between the Laurel mountain, Mississippi and Ohio, yields coal. It is also known in many places on the north side of the Ohio. The coal at Pittsburgh is of a very superior quality; a bed of it at that place has been on fire since the year 1765. Another coal hill on the Pike Run of Monongahela has been on fire for several years.

Mr. Jefferson informs us, that he has know one instance of an emerald found in this country. Amethysts have been frequent, and chrystals common; yet not in such numbers any of them as to be worth seeking.

There is very good marble, and in very great abundance, on James river, at the mouth of Rockfish; some white and as pure as one might expect to find on the surface of the earth; but generally variegated with red, blue and purple. None of it has ever been worked: it forms a very large precepice, which hangs over a navigable part of the river.

But one vain of lime-stone is known below the Blue Ridge; its first appearance is in Prince William, two miles below the Pignut ridge of mountains; thence it passes on nearly parallel with that, and crosses the Rivanna about five miles below it, where it is called the South-west ridge; it then crosses Hardware, above the mouth of Hudson's creek, James river, at the mouth of Rockfish, at the Marble Quarry before spoken of, probably runs up that river to where it appears again at Ross's iron works, and so passes off south-westwardly by Flat creek of the river Ottor; it is never more than an hundred yards wide. From the Blue Ridge westwardly the whole country seems to be founded on a rock of lime-stone, besides infinite quantities on the surface, both loose and fixed; this is cut into beds, which range, as the mountains and sea coast do, from south-west to north-east, the lamina of each bed declining from the horizon towards a parallelism with the axis of the earth. Mr. Jefferson, being struck with this observation, made, with a quadrant, a great number of trials on the angles of their declination, and found them to vary from 22° to 60° ; but averaging all his trials, the result was within one-third of a degree of the elevation of the pole or latitude of the place, and much the greatest part of them taken separately were little different from that; by which it appears, that these lamina are, in the main, parallel with the axis of the earth. In some instances, indeed, he found them perpendicular, and even reclining the other way; but these were extremely rare, and always attended with signs of convulsion, or other circumstances of singularity, which admitted a possibility of removal from their original position. These trials were made between Madison's cave and the Potomack.

Near the eastern foot of the north mountain are immense bodies of *Schist*, containing impressions of shells in a variety of

forms. Mr. Jefferson received petrified shells of very different kinds, from the first sources of the Kentucky, which bore no resemblance to any he had ever seen on the tide waters. It is said, that shells are found in the Andes, in South-America, fifteen thousand feet above the level of the ocean. This is considered by many, both of the learned and unlearned, as a proof of an universal deluge.

There is great abundance, more especially when you approach the mountains, of stone of white, blue, brown, and other colours, fit for the chissel, good mill-stone, such also as stands the fire, and slate-stone. We are told of flint, fit for gun-flints, on the Meherrin in Brunswick, on the Mississippi, between the Ohio and Kaskaskia, and on others of the western waters. Isinglass, or mica, is in several places; loadstone also, and an asbestos of a ligneous texture, is sometimes to be met with.

Marble abounds generally. A clay, of which, like the Sturbridge in England, bricks are made, which will resist long the action of fire, has been found on Tukahoe creek of James river, and no doubt will be found in other places. Chalk is said to be in Botetourt and Bedford. In the latter county is some earth, believed to be gypseous. Ochres are found in various parts.

In the lime-stone country are many caves, the earthly floors of which are impregnated with nitre. On Rich creek, a branch of the Great Kanhawa, about sixty miles below the lead mines, is a very large one, about twenty yards wide, and entering a hill a quarter or half a mile. The vault is of rock, from nine to fifteen or twenty feet above the floor. A Mr. Lynch, who gives this account, undertook to extract the nitre. Besides a coat of the salt which had formed on the vault and floor, he found the earth highly impregnated to the depth of seven feet in some places, and generally of three, every bushel yielding on an average three pounds of nitre. Mr. Lynch having made about a thousand pounds of the salt from it, consigned it to some others, who have since made large quantities. They have done this by pursuing the cave into the hill, never trying a second time the earth they have once exhausted, to see how far or soon it receives another impregnation. At least fifty of these caves are worked on the Greenbriar, and there are many of them known on Cumberland river.

An intelligent gentleman, an inhabitant of Virginia, supposes, that the caves lately discovered yield it in such abundance, that he judges five hundred thousand pounds of saltpetre might be collected annually.

MEDICINAL SPRINGS.

There are several medicinal springs, some of which are indubitably efficacious, while others seem to owe their reputation as much to fancy, and change of air and regimen, as to their real virtues. None of them have undergone a chemical analysis in skilful hands, nor been so far the subject of observation, as to have produced a reduction into classes, of the disorders which they relieve; it is in our power to give little more than an enumeration of them.

The most efficacious of these are two springs in Augusta, near the sources of James river, where it is called Jackson's river. They rise near the foot of the ridge of mountains, generally called the Warm Spring mountain, but in the maps, Jackson's mountains. The one is distinguished by the name of the Warm Spring, and the other of the Hot Spring. The Warm Spring issues with a very bold stream, sufficient to work a grist mill, and to keep the waters of its basin, which is thirty feet in diameter, at the vital warmth, viz. 96° of Fahrenheit's thermometer. The matter which these waters is allied to is very volatile; its smell indicates it to be sulphureous, as also does the circumstance of turning silver black: they relieve rheumatisms: other complains also of very different natures have been removed or lessened by them. It rains here four or five days in every week.

The hot spring is about six miles from the warm, is much smaller, and has been so hot as to have boiled an egg. Some believe its degree of heat to be lessened: it raises the mercury in Fahrenheit's thermometer to 112° , which is fever heat; it sometimes relieves where the warm spring fails. A fountain of common water, issuing within a few inches of its margin, gives it a singular appearance. Comparing the temperature of these with that of the hot springs of Kamscatka, of which Krachinnikow, gives an account, the difference is very great, the latter raising the mercury to 200° , which is within 12° of boiling water. The springs are very much resorted to, in spite of a total want of accommodation for the sick. Their waters are strongest in the hottest months, which occasions their being visited in July and August principally.

The sweet springs are in the county of Botetourt, at the eastern foot of the Allegany, about forty-two miles from the warm springs. They are still less known. Having been found

to relieve cases in which the others had been ineffectually tried, it is probable their composition is different; they are different also in their temperature, being as cold as common water; which is not mentioned, however, as a proof of a distinct impregnation. This is among the first sources of James river.

On the Potomack river, in Berkeley county, above the North mountain, are medicinal springs, much more frequented than those of Augusta: their powers, however, are less, the waters weakly mineralised, and scarcely warm. They are more visited, because situated in a fertile, plentiful and populous country, provided with better accommodations, always safe from the Indians, and nearest to the more populous States.

In Louisa county, on the head waters of the South Anna branch of York river, are springs of some medicinal virtue; they are, however, not much used. There is a weak chalybeate at Richmond, and many others in various parts of the country, which are of too little worth, or too little note to be enumerated after those before mentioned.

We are told of a sulphur spring on Howard's creek of Greenbriar.

In the low grounds of the Great Kanhawa, seven miles above the mouth of Elk river, and sixty-seven above that of the Kanhawa itself, is a hole in the earth of the capacity of thirty or forty gallons, from which issues constantly a bituminous vapour, in so strong a current, as to give to the sand about its orifice the motion which it has in a boiling spring. On presenting a lighted candle or torch within eighteen inches of the hole, it flames up in a column of eighteen inches diameter, and four or five feet in height, which sometimes burns out in twenty minutes, and at other times has been known to continue three days, and then has been left burning. The flame is unsteady, of the density of that of burning spirits, and smells like burning pit coal. Water sometimes collects in the basin, which is remarkably cold, and is kept in ebullition by the vapour issuing through it; if the vapour be fired in that state, the water soon becomes so warm, that the hand cannot bear it, and evaporates wholly in a short time. This, with the circumjacent lands, is the property of President Washington and of General Lewis.

There is a similar one on Sandy river, the flame of which is a column of about twelve inches diameter and three feet high. General Clarke kindled the vapour, staid about an hour, and left it burning.

The mention of uncommon springs leads to that of Syphon fountains : there is one of these near the intersection of the Lord Fairfax's boundary with the North mountain, not far from Brock's gap, on the stream of which is a grist mill, which grinds two bushels of grain at every flood of the spring. Another near the Cow Pasture river, a mile and a half below its confluence with the Bull Pasture river, and sixteen or seventeen miles from the hot springs, which intermits once in every twelve hours. One also near the mouth of the North Holston.

After these may be mentioned, the Natural Well on the lands of a Mr. Lewis, in Frederick county ; it is somewhat larger than a common well ; the water rises in it as near the surface of the earth as in the neighbouring artificial wells, and is of a depth as yet unknown. It is said, there is a current in it tending sensibly downwards ; if this be true, it probably feeds some fountain, of which it is the natural reservoir, distinguished from others, like that of Madison's cave, by being accessible ; it is used with a bucket and windlass as an ordinary well.

CAVERNS AND CURIOSITIES.

In the lime-stone country there are many caverns of very considerable extent. The most noted is called Madison's cave, and is on the north side of the Blue ridge, near the intersection of the Rockingham and Augusta line with the south fork of the southern river of Shenandoah. It is in a hill of about two hundred feet perpendicular height, the ascent of which, on one side, is so steep, that you may pitch a biscuit from its summit into the river which washes its base. The entrance of the cave is, in this side, about two-thirds of the way up. It extends into the earth about three hundred feet, branching into subordinate caverns, sometimes ascending a little, but more generally descending, and at length terminates in two different places, at basons of water of unknown extent, and which appear to be nearly on a level with the water of the river. The water in these basons is always cool, it is never turbid, nor does it rise or fall in times of flood or drought. It is probably one of the many reservoirs with which the interior parts of the earth are supposed to abound, and which yield supplies to the fountains of

water, distinguished from others only by its being accessible. The vault of this cave is of solid lime-stone, from twenty to forty or fifty feet high, through which water is continually percolating. This, trickling down the sides of the cave, has incruited them over in the form of elegant drapery; and dripping from the top of the vault, generates on that, and on the base below, stalactites of a conical form, some of which have met and formed massive columns.

Another of these caves is near the North mountain, in the county of Frederick. The entrance into this is on the top of an extensive ridge. You descend thirty or forty feet, as into a well, from whence the cave then extends, nearly horizontally, four hundred feet into the earth, preserving a breadth of from twenty to fifty feet, and a height of from five to twelve feet. Mr. Jefferson observes, that after entering this cave a few feet, the mercury, which in the open air was at 50° , rose to 57° of Fahrenheit's thermometer, answering to 11° of Reaumur's, and it continued at that to the remotest parts of the cave. The uniform temperature of the cellars of the observatory of Paris, which are ninety feet deep, and of all subterranean cavities of any depth, where no chymical agents may be supposed to produce a factitious heat, has been found to be 10° of Reaumur, equal to $54\frac{1}{2}^{\circ}$ of Fahrenheit. The temperature of the cave above mentioned so nearly corresponds with this, that the difference may be ascribed to a difference of instruments.

At the Panther gap, in the ridge which divides the waters of the Cow and Calf pasture, is what is called the Blowing Cave. It is in the side of a hill, is of about an hundred feet diameter, and emits constantly a current of air of such force, as to keep the weeds prostrate to the distance of twenty yards before it. This current is strongest in dry frosty weather, and weakest in long periods of rain. Regular inspirations and expirations of air, by caverns and fissures, have been probably enough accounted for, by supposing them combined with intermitting fountains, as they must of course inhale the air while the reservoirs are emptying themselves, and again emit it while they are filling. But a constant issue of air, only varying in its force as the weather is drier or damper, will require a new hypothesis. There is another blowing cave in the Cumberland mountain, about a mile from where it crosses the Carolina line. All we know of this is, that it is not constant, and that a fountain of water issues from it.

The Natural Bridge is the most sublime of nature's works. It is on the ascent of a hill, which seems to have been cloven through its length by some great convulsion. The fissure, just at the bridge, is by some admeasurements two hundred and seventy feet deep, by others only two hundred and five. It is about forty-five feet wide at the bottom, and ninety feet at the top; this of course determines the length of the bridge, and its height from the water. Its breadth in the middle is about sixty feet, but more at the ends, and the thickness of the mass at the summit of the arch about forty feet, but more at the ends, and ninety feet at the top. A part of this thickness is constituted by a coat of earth, which gives growth to many large trees. The residue, with the hill on both sides, is solid rock of lime-stone. The arch approaches the semi-elliptical form; but the larger axis of the ellipsis, which would be the chord of the arch, is many times longer than the transverse. Though the sides of this bridge are provided in some parts with a parapet of fixed rocks, yet few men have resolution to walk to them and look over into the abyss. You involuntarily fall on your hands and feet, creep to the parapet and peep over it. If the view from the top be painful and intolerable, that from below is delightful in an equal extreme. It is impossible for the emotions arising from the sublime, to be felt beyond what they are here; so beautiful an arch, so elevated, so light, and springing as it were up to Heaven, the rapture of the spectator is really indescribable! The fissure continuing narrow, deep and straight, for a considerable distance above and below the bridge, opens a short but very pleasing view of the North mountain on one side, and Blue ridge on the other, at the distance each of them of about five miles. This bridge is in the county of Rockbridge, to which it has given name, and affords a public and commodious passage over a valley, which cannot be crossed elsewhere for a considerable distance.* The stream passing under it is called Cedar creek. It is a water of James river, and sufficient in the driest seasons to turn a grist mill, though its fountain is not more than two miles above. There is a natural bridge simi-

* Don Ulloa mentions a break, similar to this, in the province of Angarez, in South-America. It is from sixteen to twenty-two feet wide, one hundred and eleven deep, and of one mile and three-quarters continuance, English measure. Its breadth at top is not sensibly greater than at bottom.

lar to the above, over Stock creek, a branch of Peleson river, in Washington county.

CIVIL DIVISIONS.

This State is divided into eighty-two counties, and by another division is formed into parishes, many of which are commensurate with the counties; but sometimes a county comprehends more than one parish, and sometimes a parish more than one county. This division had relation to the religion of the State, a minister of the Anglican church, with a fixed salary, having been heretofore established in each parish. The names and situations of these counties are as follow:

WEST OF THE BLUE RIDGE.

Ohio,	Botetourt,	Frederick,
Monongala,	Greenbriar,	Shenandoah,
Washington,	Kanhawa,	Rockingham,
Montgomery,	Hampshire,	Augusta,
Wythe,	Berkley,	Rockbridge.

BETWEEN THE BLUE RIDGE AND THE TIDE WATERS.

Loudoun,	Albemarle,	Prince Edward,
Fauquier,	Amherst,	Cumberland,
Culpepper,	Buckingham,	Powhatan,
Spotsylvania,	Bedford,	Amelia,
Orange,	Henry,	Nottaway
Louisa,	Pittsylvania,	Lunenburg,
Goochland,	Halifax,	Mecklenburgh,
Flavania,	Charlotte,	Brunswick.

BETWEEN JAMES RIVER AND CAROLINA.

Greenville,	Surry,	Nansemond,
Dinwiddie,	Suffex,	Norfolk,
Chesterfield,	Southampton,	Princess Ann.
Prince George,	Isle of Wight,	

BETWEEN JAMES AND YORK RIVERS.

Henrico,	Charles City,	York,
Hanover,	James City,	Warwick,
New-Kent,	Williamsburgh,	Elizabeth City.

BETWEEN YORK AND RAPPAHANNOCK RIVERS.

Caroline,	King and Queen,	Middlesex,
King William,	Essex,	Gloucester.

BETWEEN RAPPAHANNOCK AND POTOMACK RIVERS.

Fairfax,	King George,	Northumberland,
Prince William,	Richmond,	Lancaster.
Stafford,	Westmoreland,	

EAST SHORE.

Accomac,	Northampton.
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THE FOLLOWING ARE NEW COUNTIES.

Campbell,	Randolph,	Pendleton,
Franklin,	Hardy,	Ruffel.
Harrison,		

CHIEF TOWNS.

There are no townships in this State, nor any towns of consequence, owing, probably, to the interfection of the country by navigable rivers, which brings the trade to the doors of the inhabitants, and prevents the necessity of their going in quest of it to a distance. Williamsburgh, which, till the year 1780, was the seat of government, never contained above eighteen hundred inhabitants, and Norfolk, the most populous town they ever had in Virginia, contained but six thousand. The towns, or more properly villages or hamlets, are as follow :

On James river and its waters—Norfolk, Portsmouth, Hampton, Suffolk, Smithfield, Williamsburgh, Petersburg, Richmond, the seat of government, Manchester, Charlottesville, New London.—On York river and its waters, York, New-castle, Hanover.—On Rappahannock, Urbanna, Port Royal, Fredericksburgh, Falmouth.—On Potomack and its waters, Dumfries, Colchester, Alexandria, Winchester, Staunton.

There are places at which, like some of the foregoing, the laws have said there shall be towns, but nature has said there shall not ; and they remain unworthy of enumeration. Norfolk will probably become the emporium for all the trade of the Chesapeak bay and its waters ; and a canal of eight or ten miles, which will probably soon be completed, will bring to it all that of Albemarle sound and its waters. Secondary to this place, are the towns at the head of the tide waters, to wit, Petersburg on Appamattox, Richmond on James river, Newcastle on York river, Fredericksburgh on the Rappahannock, and Alexandria on the Potomack. From these the distribution will be to subordinate situations of the country. Accidental circumstances, however, may controul the indications of nature, and in no instances do they do it more frequently than in the rise and fall of towns.

To the foregoing general account, we had the following more particular descriptions :

ALEXANDRIA.

Alexandria stands on the south bank of Potomack river in Fairfax county ; its situation is elevated and pleasant ; the soil is clay. The original settlers, anticipating its future growth and importance, laid out the streets upon the plan of Philadelphia. It contains about six hundred houses, many of which are handsomely built, and about six thousand inhabitants. This town, upon opening the navigation of Potomack river, and in consequence of its vicinity to the city of Washington, will probably be one of the most thriving commercial places on the continent.

MOUNT VERNON.

Mount Vernon, the celebrated seat of President Washington, is pleasantly situated on the Virginia bank of the Potomack, where it is nearly two miles wide, and is about two hundred and eighty miles from the sea, and one hundred and twenty-seven from Point Look-out, at the mouth of the river. It is nine miles below Alexandria, and four miles above the beautiful seat of the late Col. Fairfax, called Bellevoir. The area of the mount is two hundred feet above the surface of the river, and, after furnishing a lawn of five acres in front, and about the same in rear of the buildings, falls off rather abruptly on those two quarters. On the north end it subsides gradually into extensive pasture grounds ; while on the south it slopes more steeply in

a shorter distance, and terminates with the coach-house, stables, vineyard, and nurseries. On either wing is a thick grove of different flowering forest trees. Parallel with them, on the land side, are two spacious gardens, into which one is led by two serpentine gravel walks, planted with weeping willows and shady shrubs. The mansion house itself (though much embellished by, yet not perfectly satisfactory to the chaste taste of the present possessor) appears venerable and convenient. The superb banquetting room has been finished since he returned home from the army. A lofty portico, ninety-six feet in length, supported by eight pillars, has a pleasing effect when viewed from the water; the whole assemblage of the green-house, school-house, offices and servants halls, when seen from the land-side, bears a resemblance to a rural village; especially as the lands on that side are laid out somewhat in the form of English gardens, in meadows and grass grounds, ornamented with little copses, circular clumps and single trees. A small park on the margin of the river, where the English fallow-deer and the American wild deer are seen through the thickets, alternately with the vessels as they are sailing along, add a romantic and picturesque appearance to the whole scenery. On the opposite side of a small creek to the northward, an extensive plain, exhibiting corn fields and cattle grazing, affords in summer a luxuriant landscape; while the blended verdure of woodlands and cultivated declivities, on the Maryland shore, variegates the prospect in a charming manner. Such are the philosophic shades to which the late commander in chief of the American armies retired from the tumultuous scenes of a busy world, and which he has since left to dignify, by his unequalled abilities, the most important office in the gift of his fellow citizens.

FREDERICKSBURGH.

Fredericksburgh, in the county of Spotsylvania, is situated on the south side of Rappahannock river, one hundred and ten miles from its mouth, and contains about two hundred houses, principally on one street, which runs nearly parallel with the river, and one thousand five hundred inhabitants.

RICHMOND.

Richmond, in the county of Henrico, is the present seat of government, and stands on the north side of James river, just at the foot of the falls, and contains between five and six hundred

houses, and from five to six thousand inhabitants. Part of the houses are built upon the margin of the river, convenient for business; the rest are upon a hill which overlooks the lower part of the town, and commands an extensive prospect of the river and adjacent country. The new houses are well built. A large state-house, or capitol, has lately been erected on the hill. The lower part of the town is divided by a creek, over which is a convenient bridge. A bridge between three and four hundred yards in length has lately been thrown across James river, at the foot of the fall, by Colonel Mayo. That part from Manchester to the island is built on fifteen boats. From the island to the rocks was formerly a floating bridge of rafts, but Colonel Mayo has now built it of framed log piers, filled with stone. From the rocks to the landing at Richmond, the bridge is continued on framed piers filled with stone. This bridge connects Richmond with Manchester; and as the passengers pay toll, it produces a considerable revenue to Colonel Mayo, who is the sole proprietor.

The falls above the bridge are seven miles in length. A noble canal is nearly, if not quite completed, on the north side of the river, which is to terminate in a basin of about two acres, in the town of Richmond. From this basin to the wharfs in the river will be a land carriage of about a mile. This canal is cutting under the direction of a company, who have calculated the expense at thirty thousand pounds Virginia money; this they have divided into five hundred shares of sixty pounds each. The opening of this canal promises the addition of much wealth to Richmond.

PETERSBURGH.

Petersburgh, twenty-five miles southward of Richmond, stands on the south side of Appamattox river, and contains upwards of three hundred houses in two divisions; one is upon a clay cold soil, and is very dirty, the other upon a plain of sand or loam. There is no regularity and very little elegance in Petersburgh, it is merely a place of business. The Free Masons have a hall tolerably elegant. It is very unhealthy, being shut out from the access of the winds by high hills on every side.* This confined situation has such an effect upon the constitutions of the inhabitants, that they very nearly resemble those of hard

* It is asserted, as an undoubted fact, by a number of gentlemen well acquainted with this town, that, in 1781, "one child only born in it had arrived to manhood, and he was a cripple."

drinkers ; hence, in the opinion of physicians, they require a considerable quantity of stimulating aliments and vinous drinks, to keep up a balance between the several functions of the body.

About two thousand two hundred hogheads of tobacco are inspected here annually. Like Richmond, Williamsburgh, Alexandria, and Norfolk, it is a corporation ; and Petersburg city comprehends a part of three counties. The celebrated Indian queen, Pocahonta, from whom descended the Randolph and Bowling families, formerly resided at this place. Petersburg and its suburbs contain about three thousand inhabitants.

WILLIAMSBURGH.

Williamsburgh,* formerly the seat of government in Virginia, stands upon an elevated, but level spot, between York and James river. Queen's creek on one side, and Archer's hope creek on the other, are navigable for small vessels within a mile of the town : during the regal government it was proposed to unite them by a canal passing through the center of the town ; but the removal of the seat of government rendered it no longer an object of importance : the town is nearly a mile in length, yet I believe it never could boast of more than two hundred houses, or, eighteen hundred inhabitants. Many of the houses were pleasantly situated and though neither elegant, nor in general built of durable materials, were neat and comfortable ; most of them had gardens ; the main street running from east to west is terminated by the capitol, and the college ; neither of them elegant structures, though perhaps easily distinguishable from ' common brick-kilns.'---Near the center of the town there is a pleasant square of about ten acres, which is generally covered with a delightful verdure ; not far from this at the extremity of a small plain stretching to the north, stood the governor's house, or palace, as it was called : though not very handsome it was spacious and commodious ; and in every respect pleasantly situated : it was burnt to the ground during the war, whilst it was occupied as an hospital for the American army.

The house of the president of the College shared the same fate, being also occupied as an hospital by the French army. The latter has been rebuilt at the expence of the French government. The capitol has hastened to decay from the moment of removing the seat of government. A late act of Assembly authorises the pulling down one half of it, to defray the charge of keeping the other half (which is still occupied as a district court house, both for the state, and the United States) in repair. The hospital for

* By a citizen of Williamsburgh in a letter addressed to the publishers of the American edition of Winterbotham's History of America.

lunatics, a church, the town and county court house, and a magazine now occupied as a market house, complete the list of public edifices : neither of them appears to have been constructed with any view to architectural fame.—The hospital for lunatics is calculated to accommodate between twenty and thirty patients in separate rooms or cells. They have, I believe, never been all filled at the same time ; the house is neatly kept, and the patients well attended ; but convalescents have not sufficient room for free air and exercise, without danger of making their escape. The college, though divested of three fourths of its revenues at the revolution, and wholly disorganized at that period, by the removal or resignation of most of the professors, has, since the peace, been successfully revived and generally the resort of from thirty to forty students, in philosophy, or in law. Their number appears to be encreasing at present, and as the students of law are by no means so numerous as formerly, it creates a presumption that science begins to be more generally cultivated among the citizens at large. The grammar school, which was for a time discontinued has been revived in the college ; there are about fifty or sixty boys in this school, who are instructed by two professors, and an usher. The students in philosophy and law, board and lodge in the town. Grammar scholars, if their parents choose it, are boarded and lodged in college, the expence of which, including washing and tuition is 28*l* per ann. or twenty guineas.—There are six professorships—One of moral philosophy, natural philosophy, and the belles lettres ; one of mathematics ; one of law ; one of modern languages ; and two of humanity. To the college belongs an extensive library, and an apparatus which is probably not exceeded by any upon the continent ; the course of natural philosophy is much more comprehensive than is usual in most colleges.

In moral philosophy the students are examined from the ablest writers on logic, the belles lettres, ethics, natural law, the law of nations and politics. In mathematics a regular course both elementary and practical is pursued.—In law a course of lectures is annually delivered on the principles of civil government ; and on the constitutions and laws of the federal government of the United States, and of the State of Virginia. In the modern languages, French, Italian, Spanish, and German may be acquired ; most of the students acquire the two former. In the Grammar school the Latin and Greek languages are taught as usual in other places. The college is so far from being in a declining state, that the number of students is now considerably greater than before the revolution. At the end of the last term, viz. about the beginning of the present month their number were between forty and fifty.

This college has probably produced its full quota of men of eminence on the political theatre of the United States. Men of high professional character in law, physic, and divinity, have there also imbibed the elements of science; and not a few of them have been indebted to it, for their whole education.

Not a few private houses have tumbled down; others are daily crumbling into ruins: there are, however, many very comfortable houses left, which have undergone some repairs, contribute to vary the scene, and there are still some neat gardens and pleasant situations; it seems to be the general idea of the inhabitants, that Williamsburgh has seen its worst days. The market, though not very regular, nor well supplied, yet furnishes excellent meats and poultry in their seasons. They have also fish, crabs, oysters, wild fowl, and excellent butter, vegetables, and fruits. There never was much trade in Williamsburgh; probably little more than at present; the situation not being very favourable either for external or an extensive internal commerce; the evidence of its present trade is to be found in about a dozen stores of European, and West-India goods. A few mechanics, such as blacksmiths, chair-makers, wheel-wrights, saddlers and harness-makers, boot and shoemakers, and tailors find employment, and a comfortable livelihood there. There are also some genteel families which form a very agreeable society; their number is considerably greater than a traveller passing through the place, would suppose. In short, how contemptible soever, Williamsburgh, arrogating to herself the rank and honours of a metropolitan city, might have appeared in the eyes of a traveller, few villages can boast a more pleasant situation, more respectable inhabitants, or a more agreeable and friendly society.

YORK-TOWN.

York-town, thirteen miles eastward from Williamsburgh, and fourteen from Monday's point at the mouth of the river, is a place of about an hundred houses, situated on the south side of York river, and contains about seven hundred inhabitants. It has been rendered famous, BY THE CAPTURE OF LORD CORNWALLIS AND HIS ARMY, on the 19th of October, 1781, by the united forces of France and America.

P O P U L A T I O N.

In the year 1781, a very inaccurate census was taken. Several counties made no return; but supplying by conjecture the deficiencies, the population of Virginia was then computed at five hundred and sixty-seven thousand six hundred and fourteen persons; according to the census of 1790, the numbers were as follow:

VIRGINIA.

COUNTIES, &c.	Free white males of 16 years and upwards.	Free white males under 16 years of age.	Free white females.	All other free persons.	Slaves.	Total.
Augusta, the part east of the north mountain }	2048	1665	3438	40	1222	8413
Part west of ditto	551	572	986	19	345	2473
Albemarle - - -	1703	1790	3342	171	5579	12585
Accomack - - -	2297	2177	4502	721	4262	13959
Amherst - - -	2056	2235	3995	121	5296	13703
Amelia, including Nottoway, a new county - - }	1709	1697	3278	106	11307	18097
Botetourt, as it stood previous to the formation of Wythe from it and Montgomery }	2247	2562	4432	24	1259	10524
Buckingham - -	1274	1537	2685	115	4168	9779
Berkeley - - -	4253	4547	7850	131	2932	19713
Brunswick - - -	1472	1529	2918	132	6776	12827
Bedford - - -	1785	2266	3674	52	2754	10531
Cumberland - - -	885	914	1778	142	4434	8153
Chesterfield - - -	1652	1557	3149	369	7487	14214
Charlotte - - -	1285	1379	2535	63	4816	10078
Culpepper - - -	3372	3755	6682	70	8226	22105
Charles City - - -	532	509	1043	363	3141	5588
Caroline - - -	1799	1731	3464	203	10292	17489
Campbell - - -	1236	1347	2363	251	2488	7685
Dinwiddie - - -	1790	1396	2853	561	7334	13934
Effex - - -	908	869	1766	139	5440	9122
Elizabeth City - -	390	388	778	18	1876	3450
Fauquier - - -	2674	2983	5500	93	6642	17892
Fairfax - - -	2138	1872	3601	135	4574	12320
Franklin - - -	1266	1629	2840	34	1073	6842
Fluvanna - - -	589	654	1187	25	1466	3921
Frederick Division	3835	4170	7310	116	4250	19681
Gloucester - - -	1597	1523	3105	210	7063	13498
Goochland - - -	1028	1059	2053	257	4656	9053
Greenville - - -	669	627	1234	212	3620	6362
Greenbrier, including Kanhawa }	1463	1574	2639	20	319	6015
Henrico - - -	1823	1170	2607	581	5819	12000

VIRGINIA.

COUNTIES, &c.	Free white males of 16 years and upwards.	Free white males under 16 years of age.	Free white females.	All other free persons.	Slaves.	Total.
Hanover - - -	1637	1412	3242	2408	2228	14754
Hampshire - - -	1662	1956	3261	13	454	7346
Harrison - - -	487	579	947		67	2080
Hardy - - -	1108	2256	3192	411	369	7336
Halifax - - -	2214	2320	4397	226	5565	14722
Henry - - -	1523	1963	3277	165	1551	8479
Isle of Wight - - -	1208	1163	2415	375	3867	9028
James City - - -	395	359	765	146	2495	4070
King William - - -	723	732	1438	84	5151	8128
King and Queen - - -	995	1026	2138	75	5143	9377
King George - - -	757	781	1585	86	4157	7366
Lunenburg - - -	1110	1185	2252	80	4332	8959
Loudoun - - -	3677	3992	7080	183	4030	8962
Lancaster - - -	535	542	1182	143	3236	5638
Louisa - - -	957	1024	1899	14	4573	8467
Mecklenburgh - - -	1857	2015	3683	416	6762	14733
Middlesex - - -	407	370	754	51	2558	4140
Monongalia - - -	1089	1345	2168	12	154	4768
Montgomery, as it stood previous to the formation of Wythe from it and Botetourte	2846	3744	5804	6	828	13228
Norfolk - - -	2650	1987	4291	251	5345	14524
Northampton - - -	857	743	1581	464	3244	6889
New Kent - - -	605	587	1199	148	3700	6239
Northumberland - - -	1046	1137	2323	197	4460	9103
Nansemond - - -	1215	1167	2331	480	3817	9010
Orange - - -	1317	1426	2693	64	4421	9921
Ohio - - -	1222	1377	2308	24	281	5212
Prince Edward - - -	1044	1077	1961	32	3986	8100
Prince William - - -	1644	1797	3303	167	4704	11610
Prince George - - -	965	822	1600	267	4519	8173
Powhatan - - -	623	548	1115	211	4325	6822
Pendleton - - -	568	686	1124	1	73	2452
Pittsylvania - - -	2008	2447	4083	62	2979	11579
Princess Anne - - -	1169	1151	2207	64	3202	7798
Richmond - - -	704	697	1517	83	3984	6987
Randolph - - -	221	270	441		19	951
Rockingham - - -	1816	1652	3209		772	7449

VIRGINIA.

COUNTIES, &c.	Free white males of 16 years and upwards.	Free white males under 16 years.	Free white females.	All other free persons.	Slaves.	Total.
Ruffel - - -	734	969	1440	5	100	3
Rockbridge - -	1517	1552	2756	41	682	60
Spotylvania - -	1361	1278	2532	148	5933	112
Stafford - - -	1341	1355	2769	87	4036	958
Southampton - -	1632	1546	3134	559	5993	1286
Surry - - -	732	651	1379	368	3097	6227
Shannandoah - -	2409	2779	4791	19	512	10
Suffex - - -	1215	1174	2382	391	5387	10554
Warwick - - -	176	158	333	33	990	1690
Washington - -	1287	1440	2440	8	450	5625
Westmoreland	815	754	1614	114	4425	7722
York - - -	580	461	1124	358	2700	5033
	110936	11613	215046	12866	292627	747610

By comparing the two accounts taken at the above different periods, it appears, that the increase in ten years was two hundred and fifty-eight thousand six hundred and seventy-three, or about twenty-five thousand eight hundred and sixty-seven per annum; allowing for the same proportional increase, the present number of inhabitants in this State cannot be less than nine hundred thousand.

The increase of slaves, during the last fourteen years, has been less than it had been observed for a century before. The reason is, that about thirty thousand slaves perished with the small-pox or camp fever, caught from the British army, or went off with them while Lord Cornwallis was roving over that State.

MILITIA.

Every able-bodied freeman, between the ages of sixteen and fifty, is enrolled in the militia. Those of every county are formed into companies, and these again into one or more battalions, according to the numbers in the county: they are commanded by colonels, and other subordinate officers, as in the regular service. In every county is a county lieutenant, who commands the whole militia in his county, but ranks only as a colonel in the

field. They have no general officers always existing: these are appointed occasionally, when an invasion or insurrection happens, and their commission determines with the occasion. The governor is head of the military as well as of the civil power. The law requires every militia man to provide himself with the arms usual in the regular service. But this injunction has always been indifferently complied with, and the arms they had have been so frequently called for to arm the regulars, that in the lower parts of the country they are entirely disarmed. In the middle country a fourth or fifth part of them may have such firelocks as they had provided to destroy the noxious animals which infest their farms; and on the western side of the Blue Ridge they are generally armed with rifles.

The interfection of Virginia, by so many navigable rivers, renders it almost incapable of defence: as the land will not support a great number of people, a force cannot soon be collected to repel a sudden invasion. If the militia bear the same proportion to the number of inhabitants now, as in 1782, they amount to more than sixty-eight thousand.

RELIGION AND CHARACTER.

The first settlers in this country were emigrants from England, of the English church, just at a point of time when it was flushed with complete victory over the religious of all other persuasions. Possessed, as they became, of the powers of making, administering, and executing the laws, they shewed equal intolerance in this country with their Presbyterian brethren, who had emigrated to the northern government; the poor Quakers were flying from persecution in England. They cast their eyes on these new countries as asylums of civil and religious freedom; but they found them free only for the reigning sect. Several acts of the Virginia assembly of 1659, 1662, and 1693, had made it penal in parents to refuse to have their children baptized, and prohibited the unlawful assembling of Quakers; had made it penal for any master of a vessel to bring a Quaker into the State, and had ordered those already here, and such as should come thereafter to be imprisoned till they should abjure the country; had provided a milder punishment for their first and second return, but death for their third; had inhibited all persons from suffering their meetings in or near their houses, entertaining them individually, or disposing of books which supported their tenets. If no capital execution took place there,

as did in New-England, it was not owing to moderation of the church, or spirit of the legislature, as may be inferred from the law itself; but to historical circumstances which have not been handed down to us. The Anglicans retained full possession of the country about a century. Other opinions began then to creep in, and the great care of the government to support their own church, having begotten an equal degree of indolence in its clergy, two thirds of the people had become Dissenters at the commencement of the late revolution. The laws, indeed, were still oppressive on them, but the spirit of the one party had subsided into moderation, and the other had risen to a degree of determination which commanded respect.

The present state of the laws on the subject of religion is as follows: the Convention of May 1776, in their declaration of rights, declared it to be a truth, and a natural right, that the exercise of religion should be free; but when they proceeded to form on that declaration the ordinance of government, instead of taking up every principle declared in the Bill of Rights, and guarding it by legislative sanction, they passed over that which asserted their religious rights, leaving them as they found them. The same Convention, however, when they met as a part of the General Assembly, in October, 1776, repealed all acts of Parliament which had rendered criminal the maintaining any opinions in matters of religion, the forbearing to repair to church, and the exercising any mode of worship; and suspended the laws giving salaries to the clergy, which suspension was made perpetual in October, 1779. Statutory oppressions in religion being thus wiped away, the Virginians remain at present under those only imposed by the common law, or by their own act of Assembly. At the common law, heresy was a capital offence, punishable by burning. Its definition was left to the ecclesiastical judges, before whom the conviction was, till the statute of the first El. c. 1. circumscribed it, by declaring, that nothing should be deemed heresy, but what had been so determined by authority of the canonical scriptures, or by one of the four first general councils, or by some other council having for the grounds of their declaration the express and plain words of the scriptures. Heresy, thus circumscribed, being an offence at the common law, their act of Assembly of October, 1777, c. 17, gives cognizance of it to the general court, by declaring, that "the jurisdiction of that court shall be general in all matters at the common law." The execution is by the writ *De hæretico comburendo*. By their own act of Assembly of 1705, c. 30, if a

person brought up in the Christian religion denied the being of a God, or the Trinity, or asserted there are more Gods than one, or denied the Christian religion to be true, or the Scriptures to be of divine authority, he is punishable on the first offence by incapacity to hold any office or employment ecclesiastical, civil or military; on the second, by disability to sue, to take any gift or legacy, to be guardian, executor, or administrator, and by three years imprisonment without bail. A father's right to the custody of his own children being founded in law on his right of guardianship, this being taken away, they may of course be severed from him, and put, by the authority of a court, into more orthodox hands. This is a summary view of that *religious slavery*, under which a people have been willing to remain, who have lavished their lives and fortunes for the establishment of their civil freedom. The error seems not sufficiently eradicated, that the operations of the mind, as well as the acts of the body, are subjected to the coercion of the laws. But rulers can have authority over such natural rights only as have been submitted to them. The rights of conscience were never submitted; man could not submit them; he is answerable for them to God. The legitimate powers of government extend to such acts only as are injurious to others; but it does me no injury for my neighbour to say there are twenty gods, or no god; it neither picks my pocket nor breaks my leg. If it be said, his testimony in a court of justice cannot be relied on, reject it then, and be the stigma on him. Constraint may make him worse, by making him a hypocrite, but it will never make him a better man. It may fix him obstinately in his errors, but will not cure them. Reason and free inquiry are the only effectual agents against error. Give a loose to them, they will support the true religion, by bringing every false one to their tribunal, to the test of their investigation. They are the natural enemies of error, and of error only. Had not the Roman government permitted free inquiry, Christianity could never have been introduced. Had not free inquiry been indulged, at the æra of reformation, the corruptions of Christianity could not have been purged away. If it be restrained now, the present corruptions will be protected, and new ones encouraged. Was the government to prescribe to us our medicine and diet, our bodies would be in such keeping as our souls are now. Thus in France the emetic was once forbidden as a medicine, and the potatoe as an article of food. Government is just as *infallible* too, when it fixes systems in physics. Galileo

was sent to the inquisition for affirming that the earth was a sphere : the government had declared it to be as flat as a trencher, and Galileo was obliged to abjure his error. This error, however, at length prevailed, the earth became a globe, and Descartes declared it was whirled round its axis by a vortex. The government in which he lived was wise enough to see that this was no question of civil jurisdiction, or we should all have been involved by authority in vortices. In fact, the vortices have been exploded, and the Newtonian principle of gravitation is now more firmly established, on the basis of reason, than it would be were the government to step in, and to make it an article of necessary faith. Reason and experiment have been indulged, and error has fled before them. It is error alone which needs the support of government ; truth can stand by itself. Subject opinion to coercion, whom will you make your inquisitors ? Fallible men ; men governed by bad passions, by private as well as public reasons. And why subject it to coercion ? To produce uniformity. But is uniformity of opinion desirable ? No more than of face and stature. Introduce the bed of Procrustes then, and as there is danger that the large men may beat the small, make us all of a size, by lopping the former and stretching the latter. Difference of opinion is advantageous in religion. The several sects perform the office of a censor morum over each other. But is uniformity attainable ? Millions of innocent men, women, and children, since the introduction of Christianity, have been burnt, tortured, fined and imprisoned ; yet we have not advanced one step towards it. What has been the effect of coercion ? To make one half the world fools, and the other half hypocrites ; to support roguery and error all over the earth. Let us reflect that this globe is inhabited by a thousand millions of people ; that these profess probably a thousand different systems of religion ; that ours is but one of that thousand ; that if there be but one right, and ours that one, we should wish to see the nine hundred and ninety-nine wandering sects gathered into the fold of truth. But against such a majority we cannot effect this by force. Reason and persuasion are the only practicable instruments. To make way for these, free inquiry must be indulged ; and how can we wish others to indulge it while we refuse it ourselves. But every state, says an inquisitor, has established some religion. We reply, no two have established the same. Is this a proof of the infallibility of establishments ? Many of the States, particularly Pennsylvania and New-York, however, have long subsisted without any establishment at all.

The experiment was new and doubtful, when they made it ; it has answered beyond conception ; they flourish infinitely. Religion is well supported ; of various kinds, indeed, but all sufficient to preserve peace and order ; or if a sect arises, whose tenets would subvert morals, good sense has fair play, and reasons and laughs it out of doors, without suffering the State to be troubled with it. They do not hang so many malefactors as in England ; they are not more disturbed with religious dissensions ; on the contrary, their morality is pure and their harmony is unparalleled ; this can be ascribed to nothing but their unbounded tolerance, because there is no other circumstance in which they differ from every nation on earth, France excepted. They have made the happy discovery, that the way to silence religious disputes, is to take no notice of them.

The present denominations of Christians in Virginia are Presbyterians, who are the most numerous, and inhabit the western parts of the State ; Episcopalians, who are the most ancient settlers, and occupy the eastern and first settled parts of the State. Intermingled with these are great numbers of Baptists and Methodists.

Virginia prides itself in being "The Ancient Dominion." It has produced some of the most distinguished and influential men that have been active in effecting the two late grand and important revolutions in America. Her political and military character will rank among the first in the page of history : but it is to be observed, that this character has been obtained for the Virginians by a few eminent men, who have taken the lead in all their public transactions, and who, in short, govern Virginia ; for the great body of the people do not concern themselves with politics ; so that their government, though nominally republican, is, in fact, oligarchical or aristocratical.

The Virginians who are rich, are in general sensible, polite, and hospitable, and of an independent spirit. The poor are ignorant and abject, but all are of an inquisitive turn. A considerable proportion of the people are much addicted to gaming, drinking, swearing, horse-racing, cock-fighting, and most kinds of dissipation. There is a much greater disparity between the rich and the poor, in Virginia, than in any of the northern States. The native inhabitants are too generally unacquainted with business, owing to their pride, and false notions of greatness. Before the revolution they considered it as beneath a gentleman to attend to mercantile concerns, and devoted their time principally to amusement. By these means the Scotch

people and other foreigners who came among them, became their merchants, and suddenly grew rich.

There must, doubtless, be an unhappy influence on the manners of the people produced by the existence of slavery among them. The whole commerce between master and slave is a perpetual exercise of the most boisterous passions, the most unremitting despotism on the one part, and degrading submission on the other. The children see this, and learn to imitate it; for man is an imitative animal. This quality is the germ of all education in him, from his cradle to his grave he is learning to do what he sees others do. If a parent could find no motive either in his philanthropy or his self-love, for restraining the intemperance of passion towards his slave, it should always be a sufficient one that his child is present; but generally it is not sufficient. The parent storms, the child looks on, catches the lineaments of wrath, puts on the same airs in the circle of smaller slaves, gives a loose to his worst of passions, and thus nursed, educated, and daily exercised in tyranny, cannot but be stamped by it with odious peculiarities. The man must be a prodigy who can retain his manners and morals undepraved by such circumstances. And with what execration should the statesman be loaded, who, permitting one half the citizens thus to trample on the rights of the other, transforms those into despots, and these into enemies; destroys the morals of the one part, and the *amor patriæ* of the other. For if a slave can have a country in this world, it must be any other in preference to that in which he is born to live and labour for another; in which he must lock up the faculties of his nature, contribute as far as depends on his individual endeavours to the evanishment of the human race, or entail his own miserable condition on the endless generations proceeding from him. With the morals of the people, their industry also is destroyed. For in a warm climate, no man will labour for himself who can make another labour for him. This is so true, that of the proprietors of slaves a very small proportion, indeed, are ever seen to labour. And can the liberties of a nation be thought secure when they have removed their only firm basis, a conviction in the minds of the people that these liberties are of the gift of God; that they are not to be violated but with his wrath?

It is impossible to be temperate and to pursue this subject through the various considerations of policy, of morals, of history, natural and civil. We must be contented to hope they will ultimately force their way into every one's mind: a change

in this State has been perceptible ever since the establishment of the present government. The spirit of the master has abated, and that of the slave arisen from the dust, his condition is now mollified, and the way at length prepared by the federal government for a total emancipation, and this with the consent of the masters, and not by their extirpation. Before the general government of America undertook the noble work of cutting up slavery by the roots, by laying the foundation of a total emancipation, the State of Virginia had as a body politic, made some advances; and some private gentlemen had likewise exerted themselves in a very considerable degree, in the cause of the oppressed Africans. A Mr. Robert Carter, of Nomina, in this State, in the year 1790, emancipated no less a number than four hundred and forty-two slaves. This is a sacrifice on the altar of humanity of perhaps an hundred thousand dollars. Vote him a triumph, crown him with laurels, and let the millions listen while he sings——

“ I would not have a slave to till my ground,
To carry me, to fan me while I sleep,
And tremble when I wake, for all the wealth
That sinews bought and sold have ever earn'd.
No: dear as freedom is, and in my heart's
Just estimation priz'd above all price,
I had much rather be MYSELF the slave,
And wear the bonds, than fasten them on HIM.”*

TRADE AND MANUFACTURES.

Before the war, the inhabitants of this State paid but little attention to the manufacture of their own cloathing. It has been thought they used to import as much as seven-eighths of their cloathing, and that they now manufacture three-quarters of it. We have before mentioned that considerable quantities of iron are manufactured in this State. To these we may add the manufacture of lead; besides which they have few others of consequence. The people are much attached to agriculture, and prefer foreign manufactures.

Before the war this State exported, *communibus annis*, according to the best information that could be obtained, as follows:

* As a proof that these are the sentiments of this gentleman, we beg leave to introduce the following quotation from a letter of his on the situation of the slaves, &c. in this State, and the abolition of the slave trade, written to a Dissenting Minister.

“ The toleration of slavery indicates VERY GREAT DEPRAVITY OF MIND,” &c.

Articles.	Quantity.	Am. in Dollars.
Tobacco - - -	55,000 hhds. of 100 lb	1,650,000
Wheat - - -	800,000 bushels	666,666 $\frac{2}{3}$
Indian corn - - -	600,000 bushels	200,000
Shipping - - -	— —	100,000
Mafts, planks, skantling, } shingles, and staves - }	— —	66,666 $\frac{2}{3}$
Tar, pitch, and turpentine	30,000 barrels	40,000
Peltry, viz. skins of deer, } beavers, otters, musk rats, } raccoons, foxes, &c. - }	180 hhds. of 600 lb	42,000
Pork - - -	4,000 barrels	40,000
Flax-feed, hemp, and cotton	— —	8,000
Pit-coal and pig iron	— —	6,666 $\frac{2}{3}$
Peas - - -	5,000 bushels	3,333 $\frac{1}{3}$
Beef - - -	1,000 barrels	3,333 $\frac{1}{3}$
Sturgeon, white shad, her- } ring - - - }	— —	3,333 $\frac{1}{3}$
Brandy, from peaches and } apples, and whiskey - }	— —	1,666 $\frac{2}{3}$
Horses - - -	— —	1,666 $\frac{2}{3}$
		<u>2,833,333$\frac{1}{3}$*</u>

The amount of exports from this State in the year succeeding October 1, 1790, consisting chiefly of articles mentioned in the foregoing table, was three million one hundred and thirty-one thousand two hundred and twenty-seven dollars. About forty thousand hogheads of tobacco only were exported this year.

In the year 1758, this State exported seventy thousand hogheads, of tobacco, which was the greatest quantity ever produced in this country in one year: But its culture has fast declined since the commencement of the war, and that of wheat taken its place. The price which it commands at market will not enable the planter to cultivate it. Were the supply still to depend on Virginia and Maryland alone, as its culture becomes more difficult, this price would rise, so as to enable the planter to surmount those difficulties and to live. But the western country on the Mississippi, and the midlands of Georgia, having fresh and fertile lands in abundance, and a hotter sun, are able to undersell these two States, and will oblige them in time to abandon the raising of tobacco altogether. And a happy obligation for them it will be. It is a culture productive of infinite

* This sum is equal to eight hundred and fifty thousand pounds Virginia money, six hundred and fifty-seven thousand one hundred forty-two guineas.

wretchedness. Those employed in it are in a continued state of exertion beyond the powers of nature to support. Little food of any kind is raised by them; so that the men and animals on these farms are badly fed, and the earth is rapidly impoverished. The cultivation of wheat is the reverse in every circumstance. Besides cloathing the earth with herbage, and preserving its fertility, it feeds the labourers plentifully, requires from them only a moderate toil, except in the season of harvest, raises great numbers of animals for food and service, and diffuses plenty and happiness among the whole. It is easier to raise an hundred bushels of wheat than a thousand weight of tobacco, and it is worth more when produced.

It is not easy to say what are the articles either of necessity, comfort, or luxury, which cannot be raised here, as every thing hardier than the *olive*, and as hardy as the *fig*, may be raised in the open air. Sugar, coffee, and tea, indeed, are not between these limits; and habit having placed them among the necessaries of life with the wealthy, as long as these habits remain, they must go for them to those countries which are able to furnish them.

COLLEGES, ACADEMIES, LITERATURE, &c.

The college of William and Mary was founded in the time of King William and Queen Mary, who granted to it twenty thousand acres of land, and a penny a pound duty on certain tobaccos exported from Virginia and Maryland, which had been levied by the statute of 25 Car. II. The Assembly also gave it, by temporary laws, a duty on liquors imported, and skins and furs exported. From these resources it received upwards of three thousand pounds. The buildings are of brick, sufficient for an indifferent accommodation of perhaps one hundred students. By its charter it was to be under the government of twenty visitors, who were to be its legislators, and to have a president and six professors, who were incorporated: it was allowed a representative in the General Assembly. Under this charter, a professorship of the Greek and Latin languages, a professor of mathematics, one of moral philosophy, and two of divinity, were established. To these were annexed, for a sixth professorship, a considerable donation by a Mr. Boyle of England for the instruction of the Indians, and their conversion to Christianity: this was called the professorship of Brafferton, from an estate of that name in England, purchased with the monies given. The admission of the learners of Latin and Greek filled the college with children; this rendering it disagreeable to the young gentlemen already prepared for entering on the sciences, they

desisted from resorting to it, and thus the schools for mathematics and moral philosophy, which might have been of some service, became of very little use. The revenues too were exhausted in accommodating those who came only to acquire the rudiments of science. After the present revolution, the visitors having no power to change those circumstances in the constitution of the college which were fixed by the charter, and being therefore confined in the number of professorships, undertook to change the objects of the professorships. They excluded the two schools for divinity, and that for the Greek and Latin languages, and substituted others; so that at present they stand thus—a professorship for law and police; anatomy and medicine; natural philosophy and mathematics; moral philosophy, the law of nature and nations, the fine arts; modern languages; for the Brafferton.

Measures have been taken to increase the number of professorships, as well for the purpose of subdividing those already instituted, as of adding others for other branches of science. To the professorships usually established in the universities of Europe, it would seem proper to add one for the ancient languages and literature of the north, on account of their connection with our own languages, laws, customs, and history. The purposes of the Brafferton institution would be better answered by maintaining a perpetual mission among the Indian tribes; the object of which, besides instructing them in the principles of Christianity, as the founder requires, should be to collect their traditions, laws, customs, languages, and other circumstances which might lead to a discovery of their relation to one another, or descent from other nations. When these objects are accomplished with one tribe, the missionary might pass on to another.

The college edifice is a huge, misshapen pile; “which but that it has a root, would be taken for a brick kiln.” In 1787, there were about thirty young gentlemen members of this college, a large proportion of which were law students. The academy in Prince Edward county has been erected into a college by the name of Hampden Sydney college. It has been a flourishing seminary, but is now said to be on the decline.

There are several academies in Virginia; one at Alexandria, one at Norfolk, and others in other places.

Since the declaration of independence, the laws of Virginia have been revised by a committee appointed for the purpose, who have reported their work to the Assembly; one object of this revision was to diffuse knowledge more generally through the mass of the people. The bill for this purpose “proposes to lay

off every county into small districts of five or six miles square, called hundreds, and in each of them to establish a school for the teaching of reading, writing, and arithmetic. The tutor to be supported by the hundred, and all persons in it entitled to send their children three years gratis, and as much longer as they please, paying for it. These schools to be under a visitor, who is annually to chuse the boy of the best genius in the school, of those whose parents are too poor to give them farther education, and to send him forward to one of the grammar schools, of which twenty are proposed to be erected in different parts of the country, for teaching Greek, Latin, Geography, and the higher branches of numerical arithmetic. Of the boys thus sent in any one year, trial is to be made at the grammar schools, for one or two years, and the best genius of the whole selected and continue six years, and the residue dismissed; by this means twenty of the best geniusses will be taken from the mass annually, and instructed, at the public expense, so far as the grammar schools go. At the end of six years instruction, one half are to be discontinued, from among whom the grammar schools will probably be supplied with future masters, and the other half, who are to be chosen for the superiority of their parts and disposition, are to be sent and continued three years in the study of such sciences as they shall chuse, at William and Mary college, the plan of which is proposed to be enlarged, as has been explained, and extended to all the useful sciences. The ultimate result of the whole scheme of education would be the teaching all the children of the State reading, writing, and common arithmetic; turning out ten annually of superior genius, well taught in Greek, Latin, geography, and the higher branches of arithmetic; turning out ten others annually, of still superior parts, who, to those branches of learning, shall have added such of the sciences as their genius shall have led them to; the furnishing to the wealthier part of the people convenient schools, at which their children may be educated, at their own expense. The general objects of this law are to provide an education adapted to the years, to the capacity, and the condition of every one, and directed to their freedom and happiness. Specific details were not proper for the law: these must be the business of the visitors entrusted with its execution. The first stage of this education being the schools of the hundreds, wherein the great mass of the people will receive their instruction, the principal foundations of future order will be laid here. The first elements of morality may be instilled into their minds; such as, when farther developed as their judgments advance in strength, may teach them how to promote

their own greatest happiness, by shewing them that it does not depend on the condition of life in which nature has placed them, but is always the result of a good conscience, good health, occupations, and freedom in all just pursuits. Those whom either the wealth of their parents, or the adoption of the State, shall destine to higher degrees of learning, will go on to the grammar schools, which constitute the next stage, there to be instructed in the languages. As soon as they are of a sufficient age, it is supposed they will be sent on from the grammar schools to the university, which constitutes the third and last stage, there to study those sciences which may be adapted to their views. By that part of the plan which prescribes the selection of the youths of genius from among the classes of the poor, the State will avail itself of those talents which nature has sown as liberally among the poor as the rich, but which perish without use, if not sought for and cultivated. But of all the views of this law none is more important, none more legitimate, than that of rendering the people the safe, as they are the ultimate, guardians of their own liberty : for this purpose, the reading in the first stage, where they will receive their own education, is proposed, to be chiefly historical. History, by apprising them of the past, will enable them to judge of the future ; it will avail them of the experience of other times and other nations ; it will qualify them as judges of the actions and designs of men ; it will enable them to know ambition under every disguise it may assume ; and knowing it, to defeat its views. In every government on earth there is some trait of human weakness, some germ of corruption and degeneracy, which cunning will discover, and wickedness insensibly open, cultivate and improve. Every government degenerates when trusted to the rulers of the people alone : the people themselves therefore are its only safe depositories ; and to render even them safe, their minds must be improved to a certain degree : this, indeed, is not all that is necessary, though it be essentially necessary. The influence over government must be shared among all the people. If every individual which composes their mass participates of the ultimate authority, the government will be safe ; because the corrupting the whole mass will exceed any private resources of wealth ; and public ones cannot be provided but by levies on the people : in this case every man would have to pay his own price. The government of Great-Britain has been corrupted, because but one man in thirty has a right to vote for members of Parliament. The sellers of the government therefore get twenty-nine parts out of thirty of their price clear.

The excellent measures for the diffusion of useful knowledge, which the formentioned bill proposes, have not yet been carried into effect. And it will be happy if the great inequality in the circumstances of the citizens; the pride, the independence, and the indolence of one class, and the poverty and depression of the other, do not prove insuperable difficulties in the way of their universal operation.

CONSTITUTION.

The Constitution, which was the first that was formed in the whole United States, is as follows :

We, the delegates and representatives of the good people of Virginia, do declare the future form of government of Virginia to be as followeth :

The legislative, executive and judiciary departments shall be separate and distinct, so that neither exercise the powers properly belonging to the other ; nor shall any person exercise the powers of more than one of them at the same time, except that the justices of the county courts shall be eligible to either House of Assembly.

The legislative shall be formed of two distinct branches, who, together, shall be a complete legislature. They shall meet once, or oftener, every year, and shall be called, *THE GENERAL ASSEMBLY OF VIRGINIA*. One of these shall be called, *THE HOUSE OF DELEGATES*, and consist of two representatives to be chosen for each county, and for the district of West-Augusta, annually, of such men as actually reside in and are freeholders of the same, or duly qualified according to law ; and also of one delegate or representative to be chosen annually for the city of Williamsburgh, and one for the borough of Norfolk, and a representative for each of such other cities and boroughs as may hereafter be allowed particular representation by the legislature ; but when any city or borough shall so decrease, as that the number of persons having right of suffrage therein shall have been for the space of seven years successively less than half the number of voters in some one county in Virginia, such city or borough thenceforward shall cease to send a delegate or representative to the Assembly.

The other shall be called, *THE SENATE*, and consist of twenty-four members, of whom thirteen shall constitute a House to proceed on business, for whose election the different counties shall be divided into twenty-four districts, and each county

of the respective district, at the time of the election of its delegates, shall vote for one senator, who is actually a resident and freeholder within the district, or duly qualified according to law, and is upwards of twenty-five years of age; and the sheriffs of each county, within five days at farthest after the last county election in the district, shall meet at some convenient place, and from the poll so taken in their respective counties, return as a senator the man who shall have the greatest number of votes in the whole district. To keep up this Assembly by rotation, the districts shall be equally divided into four classes, and numbered by lot. At the end of one year after the general election, the six members elected by the first division shall be displaced, and the vacancies thereby occasioned supplied from such class or division by new election in the manner aforesaid. This rotation shall be applied to each division according to its number, and continued in due order annually.

The right of suffrage in the election of members for both Houses shall remain as exercised at present, and each House shall chuse its own speaker, appoint its own officers, settle its own rules of proceeding, and direct writs of election for the supplying intermediate vacancies.

All laws shall originate in the House of Delegates, to be approved of or rejected by the Senate, or to be amended with consent of the House of Delegates, except money bills, which in no instance shall be altered by the Senate, but wholly approved or rejected.

A Governor, or chief magistrate, shall be chosen annually, by joint ballot of both Houses, to be taken in each House respectively, deposited in the conference-room, the boxes examined jointly by a committee of each House, and the numbers severally reported to them, that the appointments may be entered (which shall be the mode of taking the joint ballot of both Houses in all cases) who shall not continue in that office longer than three years successively, nor be eligible until the expiration of four years after he shall have been out of that office. An adequate, but moderate salary shall be settled on him during his continuance in office; and he shall, with the advice of a council of state, exercise the executive powers of government, according to the laws of this Commonwealth; and shall not, under any pretence, exercise any power or prerogative by virtue of any law, statute or custom of England; but he shall, with the advice of the council of state, have the power of granting reprieves or pardons, except where the prosecution shall

have been carried on by the House of Delegates, or the law shall otherwise particularly direct; on which cases no reprieve or pardon shall be granted, but by resolve of the House of Delegates.

Either House of the General Assembly may adjourn themselves respectively. The governor shall not prorogue or adjourn the Assembly during their sitting, nor dissolve them at any time: but he shall, if necessary, either by advice of the Council of State, or on application of a majority of the House of Delegates, call them before the time to which they shall stand prorogued or adjourned.

A Privy Council, or Council of State, consisting of eight members, shall be chosen by joint ballot of both Houses of Assembly, either from their own members of the people at large, to assist in the administration of government. They shall annually chuse, out of their own members, a president, who, in case of death, inability or absence of the governor, from the government, shall act as lieutenant-governor. Four members shall be sufficient to act, and their advice and proceedings shall be entered on record, and signed by the members present (to any part whereof any member may enter his dissent) to be laid before the General Assembly, when called for by them. This council may appoint their own clerk, who shall have a salary settled by law, and take an oath of secrecy in such matters as he shall be directed by the board to conceal. A sum of money appropriated to that purpose shall be divided annually among the members, in proportion to their attendance; and they shall be incapable, during their continuance in office, of sitting in either House of Assembly. Two members shall be removed, by joint ballot of both Houses of Assembly, at the end of every three years, and be ineligible for the three next years. These vacancies, as well as those occasioned by death or incapacity, shall be supplied by new elections in the same manner.

The delegates for Virginia in the Continental Congress shall be chosen annually, or superseded in the mean time by joint ballot of both Houses of Assembly.

The present militia officers shall be continued, and vacancies supplied, by appointment of the governor, with the advice of the privy council, on recommendations from the respective county courts; but the governor and council shall have a power of suspending any officer, and ordering a court-martial on complaint of misbehaviour or inability, or to supply vacancies of officers happening when in actual service.

The governor may embody the militia, with the advice of the privy council; and, when embodied, shall alone have the direction of the militia under the laws of the country.

The two Houses of Assembly shall, by joint ballot, appoint judges of the Supreme Court of Appeals, and General Court, judges in Chancery, judges of Admiralty, secretary, and the attorney-general, to be commissioned by the governor, and continue in office during good behaviour. In case of death, incapacity or resignation, the governor, with the advice of the privy council, shall appoint persons to succeed in office, to be approved or displaced by both Houses. These officers shall have fixed and adequate salaries, and, together with all others holding lucrative offices, and all ministers of the gospel, of every denomination, be incapable of being elected members of either House of Assembly, or the privy council.

The governor, with the advice of the privy council, shall appoint justices of the peace for the counties; and in case of vacancies, or a necessity of increasing the number hereafter, such appointments to be made upon the recommendation of the respective county courts. The present acting secretary in Virginia, and clerks of all the county courts, shall continue in office. In case of vacancies, either by death, incapacity or resignation, a secretary shall be appointed as before directed, and the clerks by the respective courts. The present and future clerks shall hold their offices during good behaviour, to be judged of and determined in the General Court. The sheriffs and coroners shall be nominated by the respective courts, approved by the governor, with the advice of the privy council, and commissioned by the governor. The justices shall appoint constables; and all fees of the aforesaid officers be regulated by law.

The governor, when he is out of office, and others offending against the State, either by mal-administration, corruption or other means, by which the safety of the State may be endangered, shall be impeachable by the House of Delegates; such impeachment to be prosecuted by the attorney-general, or such other person or persons as the House may appoint, in the General Court, according to the laws of the land. If found guilty, he or they shall be either for ever disabled to hold any office under government, or be removed from such office *pro tempore*, or subjected to such pains or penalties as the law shall direct.

If all, or any of the judges of the General Court should, on good grounds to be judged of by the House of Delegates,

be accused of any of the crimes or offences above mentioned, such House of Delegates may, in like manner, impeach the judge or judges so accused, to be prosecuted in the Court of Appeals; and he or they, if found guilty, shall be punished in the same manner as prescribed in the preceding clause.

Commissions and grants shall run, *In the name of the Commonwealth of Virginia*, and bear test by the governor, with the seal of the Commonwealth annexed. Writs shall run in the same manner, and bear test by the clerks of the several courts. Indictments shall conclude, *Against the peace and dignity of the Commonwealth*.

A treasurer shall be appointed annually, by joint ballot of both Houses.

All escheats, penalties and forfeitures, heretofore going to the King, shall go to the Commonwealth, save only such as the legislature may abolish, or otherwise provide for.

The territories contained within the charters erecting the colonies of Maryland, Pennsylvania, North and South Carolina, are hereby ceded, released, and for ever confirmed to the people of these colonies respectively, with all the rights of property, jurisdiction and government, and all other rights whatsoever, which might at any time heretofore have been claimed by Virginia, except the free navigation and use of the rivers Potomack and Pokomoke, with the property of the Virginia shores and strands bordering on either of the said rivers, and all improvements which have been or shall be made thereon. The western and northern extent of Virginia shall, in all other respects, stand as fixed by the charter of King James the First, in the year one thousand six hundred and nine, and by the public treaty of peace between the Courts of Britain and France, in the year one thousand seven hundred and sixty-three; unless, by act of this legislature, one or more governments be established westward of the Allegany mountains. And no purchases of lands shall be made of the Indian natives but on behalf of the public, by authority of the General Assembly.

L A W S.

The following are worthy of notice, as variations from the English law.

Debtors unable to pay their debts, and making faithful delivery of their whole effects, are released from their confinement, and their persons for ever discharged from restraint for such previous debts; but any property they may afterwards acquire

will be subject to their creditors. The poor, unable to support themselves, are maintained by an assessment on the titheable persons in their parish. A foreigner of any nation, not in open war, becomes naturalised by moving to the State to reside, and taking an oath of fidelity, and thereby acquires every right of a native citizen. — Slaves pass by descent and dower as lands do. Slaves, as well as lands, were entailable during the monarchy ; but, by an act of the first republican Assembly, all donees in tail, present and future, were vested with the absolute dominion of the entailed subject. Gaming debts are made void, and monies actually paid to discharge such debts, if they exceed forty shillings, may be recovered by the payer within three months, or by any other person afterwards. Tobacco, flour, beef, pork, tar, pitch and turpentine, must be inspected by persons publicly appointed before they can be exported.

In 1785, the Assembly enacted, that no man should be compelled to support any religious worship, place or minister whatsoever, nor be enforced, restrained, molested or burdened in his body or goods, nor otherwise suffer on account of his religious opinions or belief ; but that all men should be free to profess, and by argument to maintain, their opinion in matters of religion ; and that the same should in no wise diminish, enlarge or effect their civil capacities.

In October, 1786, an act was passed by the Assembly, prohibiting the importation of slaves into the Commonwealth, upon penalty of the forfeiture of the sum of a thousand pounds for every slave. And every slave imported contrary to the true intent and meaning of this act, becomes free.

I N D I A N A.

INDIANA, so called, is a tract of land lying on the Ohio river, in the State of Virginia, ceded to William Trent and twenty-two others, by the Six Nations, and the Shawanese, Delaware and Huron tribes, as a compensation for the losses they had sustained by the depredations of the latter, in the year 1763. This cession was made in a congress of the representatives of the Six Nations, at Fort Stanwix, by an indenture, signed the 3d of November, 1768, witnessing, "That for and in consideration of eighty-five thousand nine hundred and sixteen pounds, ten shillings and eight pence, York currency, the same being the amount of goods seized and taken by the said Indians from the said Trent, &c. they did grant, bargain, sell, &c. to his Majesty, his heirs and successors, for the only use of the said William Trent, &c. all that tract or parcel of land, beginning at the southerly side of the Little Kanhawa creek, where it empties itself into the river Ohio; and running thence south-east to the Laurel hill; thence along the Laurel hill until it strikes the river Monongahela; thence down the stream of the said river, according to the several courses thereof, to the southern boundary line of the province of Pennsylvania; thence westwardly along the course of the said province boundary line as far as the same shall extend; thence by the same course to the river Ohio, and then down the river Ohio to the place of beginning, inclusively." This indenture was signed by six Indian chiefs, in presence of Sir William Johnson, Governor Franklin, of New-Jersey, and the commissioners from Virginia, Pennsylvania, &c. making twelve in the whole.

Since the Indians had an undisputed title to the above limited territory, either from pre-occupancy or conquest, and their right was expressly acknowledged by the above deed of cession to the crown, it is very evident that Mr. Trent, in his own right, and as attorney for the traders, has a good, lawful and sufficient title to the land granted by the said deed of conveyance.

This matter was laid before Congress in the year 1782, and a committee appointed to consider it, who, in May, reported as follows: "On the whole, your committee are of opinion that

the purchases of Colonel Croghan and the Indian company, were made *bona fide* for a valuable consideration, according to the then usage and customs of purchasing Indian lands from the Indians, with the knowledge, consent and approbation of the Crown of Great-Britain, the then government of New-York and Virginia, and therefore do recommend that it be

“*Resolved*, That if the said lands are finally ceded or adjudged to the United States in point of jurisdiction, that Congress will confirm to such of the said purchasers who are, and shall be citizens of the United States, or either of them, their respective shares and proportions of said lands, making a reasonable deduction for the value of the quit rents reserved by the Crown of England.”

Notwithstanding this report of the committee, the question could never be brought to a decision before Congress. The Federal Constitution has, however, made provision for the determination of this business, before the Supreme Federal Court. But previous to an appeal to this Court, the proprietors thought proper, by their agent, Colonel Morgan, who is also a proprietor, to present a memorial to the legislature of Virginia, setting forth their claims, and praying that the business might be equitably settled. This memorial was presented in November, 1790; and thus, we believe, the Indiana business rests for the present.

STATE OF KENTUCKY.

SITUATION, EXTENT, AND BOUNDARIES.

THIS State is situated between $36^{\circ} 30'$ and $39^{\circ} 30'$ north latitude, and 8° and 15° west longitude from Philadelphia; its length is about two hundred and fifty miles, and its breadth two hundred. It is bounded on the north and north-west by Great Sandy creek and the Ohio river; on the west by Cumberland river; on the south by the lands laid off from North-Carolina, called the Tennessee government; on the east by Sandy river, and a line drawn due south from its source, till it strikes the northern boundary line of North-Carolina.

CLIMATE.

This country is more temperate and healthy than almost any of the other settled parts of America. In summer it is without the sandy heats which Virginia and Carolina experience, and receives a fine air from its rivers. In winter, which at most only lasts three months, commonly but two, and is but seldom severe, the people are safe in bad houses; and the beasts have a good supply without fodder. The winter begins about Christmas, and ends about the first of March, at farthest does not exceed the middle of that month. Snow seldom falls deep or lies long. The west winds often bring storms, and the east winds clear the sky; but there is no steady rule of weather in that respect, as in the northern States. The west winds are sometimes cold and nitrous. The Ohio running in that direction, and there being mountains on that quarter, the western winds, by sweeping along their tops, in the cold regions of the air, and over a long tract of frozen water, collect cold in their course, and convey it over the Kentucky country; but the weather is not so intensely severe as these winds bring with

them in Pennsylvania. The air and seasons depend very much on the winds, as to heat and cold, dryness and moisture.

FACE OF THE COUNTRY, SOIL, AND PRODUCTIONS.

In describing a country like this, it is almost impossible to treat these subjects separately without a repetition of the same remarks and observations; we, therefore, have preferred blending them together, and as an attention to the different rivers which water this State will greatly assist the European reader, in attaining a proper view of the soil, &c. we shall first mention the principal of them.

The beautiful river Ohio bounds Kentucky on the north-western side in its whole length, being a mile and sometimes less in breadth, and is sufficient to carry boats of great burthen; its general course is south 60° west; and in its course it receives numbers of large and small rivers, which mingle with its streams. The only disadvantage this fine river has, is a rapid, one mile and a half long, and one mile and a quarter broad, called the falls of Ohio. In this place the river runs over a rocky bottom, and the descent is so gradual, that the fall does not probably in the whole exceed twenty feet. In some places we may observe it to fall a few feet. When the stream is low, empty boats only can pass and repass this rapid; their lading must be transported by land; but when high, boats of any burthen may pass in safety. Excepting this place, there is not a finer river in the world for navigation by boats.* Besides this, Kentucky is watered by eight smaller rivers, and many large and small creeks.

LICKING RIVER, heading in the mountains with Cumberland river, and the north branch of Kentucky, runs in a north-west direction for upwards of one hundred miles, collecting its silver streams from many branches, and is about an hundred yards broad at its mouth.

RED RIVER† heads and interlocks with the main branch of Licking, and flows in a south-west course into Kentucky river, being about sixty miles long, and sixty yards wide at its mouth.

* The river Ohio is, beyond all competition, the most beautiful in the universe, whether we consider it for its meandering course through an immense region of forests, for its clean and elegant banks, which afford innumerable delightful situations for cities, villages and improved farms or for those many other advantages, which truly entitle it to the name originally given it by the French, of *La Belle Riviere*. Journal of a Tour in Kentuckey, American Museum, for 1792.

† This river is a principal branch of the Kentucky.

KENTUCKY RIVER, rises with three heads, from a mountainous part of the country; its northern branch interlocks with Cumberland; runs half way in a westerly direction, and the other half north-westerly. It is amazingly crooked upwards of two hundred miles in length, and about one hundred and fifty yards broad.

ELKHORN, is a small river which empties itself into Kentucky in a north-west-by-west course: is about fifty miles long, and fifty-yards broad at the mouth.

DICK'S RIVER, joins the Kentucky in a north-west direction; is about forty-five miles long, and forty-five yards wide at its mouth. This river curiously heads and interlocks its branches with Salt river, Green river, and the waters of Rockcastle river.

SALT RIVER, rises at four different places near each other. The windings of this river are curious, rolling its streams round a spacious tract of fine land, and uniting almost fifteen miles before they approach the Ohio, and twenty miles below the falls. It is amazingly crooked, and runs a western course near ninety miles.

GREEN RIVER, interlocking with the heads of Dick's river, as mentioned above, is also amazingly crooked; it keeps a western course for upwards of one hundred and fifty miles, and is about eighty yards wide at its mouth, which is about two hundred and twenty miles below the falls.

CUMBERLAND RIVER, interlocks with the northern branch of Kentucky, as aforesaid, and rolling round the other arms of the Kentucky among the mountains, in a southern course for one hundred miles, then in a south-western course for above one hundred miles, then in a southern and south-western course for about two hundred and fifty more, finds the Ohio four hundred and thirteen miles below the falls. At Nashville this river is two hundred yards broad, and its mouth three hundred, having passed through the territory south of the Ohio about half its course.

The Great Kanhawa, or New river, rises in North-Carolina, runs in a northern and north-western course, for upwards of four hundred miles, and finds the Ohio four hundred miles above the falls. It is about five hundred yards wide at its mouth. These two rivers are just mentioned, being beyond the limits of this State. They run contrary courses, are exceeding large, and it is worth notice, that Clinch, Holstein, Nolichucky and French-Broad rivers, take their rise between these two, or rather westward of New river, some of them rising and

interlocking with it; and when they meet, form what is called the Tennessee river, which runs a western course, and finds the Ohio twelve miles below Cumberland river: it is very large, and has spacious tracts of fine land.

These rivers are navigable for boats almost to their sources, without rapids, for the greatest part of the year. Frequent rains in the latter end of the autumn produce floods in the Ohio, and it is an uncommon season when one of those floods does not happen before Christmas. If there is much frosty weather in the upper parts of the country, its waters generally remain low until they begin to thaw. But if the river is not frozen over, which is not very common, there is always water sufficient for boats of any size, from November until May, when the waters generally begin to subside; and by the middle of June, in most seasons, they are too low for boats above forty tons, and these must be flat-bottomed. The frost seldom continues so long as the middle of February, and immediately upon its breaking, the river is flooded; this flood may in a degree subside, but for no length of time; and it is from that period until May, that the boats generally come down the river. The distance of descending is in proportion to the height of the water; but the average distance is about eighty miles in twenty-four hours, and from sixty to one hundred are the extremes; so that the mean time of going in a flat-bottomed boat from Pittsburgh to the rapids is between eight and nine days, and about twenty days more to New-Orleans; which will make a passage from Pittsburgh to that place nearly a month.

The little rivulets which chequer this country begin to lessen in June, and quite disappear in the months of August, September and October; the autumnal rains, however, in November replenish them again. The method of getting a supply of water in the dry season is by sinking wells, which are easily dug, and afford excellent water. The want of water in autumn is the great complaint. Mills that may be supplied with water eight months in a year, may be erected in a thousand different places. Wind-mills and horse-mills will supply the other four months.

The banks of the rivers are generally high and composed of lime-stone. After heavy rains, the water in the rivers rises from ten to thirty feet.

The country in some parts is nearly level, in others not so much so, in others again hilly, but moderately, and in such places there is most water. The levels are not like a carpet, but interspersed with small risings and declivities, which form a beautiful prospect.

A great part of the soil is amazingly fertile, some not so good, and some poor. The inhabitants distinguish its quality by first, second, and third rate lands; and scarcely any such thing as a marsh or swamp is to be found. There is a ridge where Kentucky rises, nearly of the size of a mountain.

All the land below the Great Kanhawa, until we come near the waters of Licking river, is broken, hilly, and generally poor; except in some valleys, and on Little and Great Sandy creeks, where there is some first rate land, but mostly second and third rate: it is said that near this water is found a pure salt rock. Upon the north branch of Licking, we find a great body of first rate land. This stream runs nearly parallel to the Ohio for a considerable distance, and is about seven miles from the mouth of Lime-stone creek, where is a fine harbour for boats coming down the Ohio, and now a common landing; it is sixty-five miles from Lexington, to which there is a large waggon road. The main branch of Licking, is about twenty-two miles from Lime-stone; on this stream we find some first, but mostly second and third rate lands, and towards its head something hilly. There we find the Blue Licks, two fine salt springs, where great plenty of salt may be made. Round these licks, the soil is poor for some distance, being much impregnated with salt.

The southern branch of Licking, and all its other arms, spread through a great body of first, and some second rate land, where there is abundance of cane, and some salt licks and springs. On these several branches of Licking are good mill seats, with navigation to the Ohio, from the fork down to its mouth. The land is hilly, and generally poor, yet along the streams and in valleys we find some excellent land.

The Elkhorn lands are much esteemed, being situated in a bend of Kentucky river, of great extent, in which this little river, or rather large creek, rises. Here we find mostly first rate land, and near the Kentucky river second and third rate. This great tract is beautifully situated, covered with cane, wild rye, and clover, and many of the streams afford many fine mill seats.

The lands below the mouth of Elkhorn, up Eagle creek, and toward the Ohio, are hilly and poor, except those contained in a great bend of the Ohio, opposite the Great Miami, cut off by the Big-bone and Bank-lick creeks, interlocking, and running separate courses. Here we find a great deal of good land, but something hilly.

On Kentucky river we find many fertile valleys, or bottoms along the river, especially towards its rise. There is good land also on Red river, but toward the heads of this and the Kentucky, the soil is broken; but even here, we find in valleys and along the streams, a great deal of fruitful land. Generally the soil within a mile or two of Kentucky river is of the third and fourth rates; from about that distance, as we leave it on either side, we approach good lands. The country through which it winds its course, for the most part, may be considered as level to its banks, or rather precipices; from the brow of which we behold the river, three and sometimes four hundred feet deep, like a great canal.

Dick's river runs through a great body of first rate land, abounding every where with cane, and affords many excellent mill seats. Many mills are already built on this stream, and will have a plentiful supply of water in the driest seasons. The banks of this river, near its mouth, are similar to the banks of the Kentucky. The several streams and branches of Salt river afford excellent mill seats; these roll themselves through a great tract of excellent land, but the country from the junction of these waters, and some miles above towards the Ohio, which may be about twenty-five miles, is level and poor, and has abundance of ponds. For a considerable distance from the head of this river, the land is of the first quality, well situated, and abounds with fine cane. Upon this and Dick's river, the inhabitants are chiefly settled, it being the safest part of the country from the incursions of the Indians.

Green river affords excellent mill seats, and a constant stream. This is allowed to be the best watered part of Kentucky. On its banks we find many fine bottoms, some first rate, but mostly second and third rate lands, and at some distance, many knobs, ridges, and broken poor land. Below a creek called Sinking creek, on this river, within fifty miles of the Ohio, towards Salt river, a great territory begins, called Green river Barrens, extending to the Ohio; it has no timber, and little water, but affords excellent pasturage for cattle. On some parts of this river we find abundance of cane, some salt licks, and sulphureous and bituminous springs.

That part of Cumberland river which is in the Kentucky country, traverses a hilly poor land, though in some parts we find good soil along its sides. The other rivers mentioned, viz. Great Kanhawa and Tennessee, are not in the Kentucky country, and therefore will be treated of in another place.

The reader by casting his eye upon the map, and viewing round the heads of Licking from the Ohio, and round the heads of Kentucky, Dick's river, and down the Green river to the Ohio, may view in that great compass of above one hundred miles square, the most extraordinary country upon which the sun ever shone.

South of Green river, in the lands reserved for the continental and state troops of Virginia, an exceeding valuable lead mine has lately been discovered. Iron ore is likewise found on Rough creek, a stream running into this river.

The Ohio river, the great reservoir of all the numerous rivers that flow into it from both banks, has many fine valleys along its sides, and we observe that opposite to each of them there is a hill, these hills and bottoms changing sides alternately. It only remains under this head to inform the reader that there is a great body of first rate lands near the falls or rapids, called Bear-grass; and it will be sufficient just to mention, that the country on the north-west side of the Ohio is allowed by all travellers to be a most fertile level country, and well-watered.

The soil of Kentucky is of a loose, deep black mould, without sand, in the first rate lands, about two or three feet deep, and exceedingly luxurious in all its productions.* In some places the mould inclines to brown; in some the wood, as the natural consequence of too rich a soil, is of little value, appearing like dead timber and large stumps in a field lately cleared. These parts are not considerable. The country in general may be considered as well timbered, producing large trees of many kinds,

* As the quality of the land is the great object to emigrants, every one must be pleased with the soil, and was that the only thing requisite to make a country valuable or pleasing, Kentucky would be the most so in the world, as the land is no where excelled. After you are got fairly into Kentucky, the soil assumes a black appearance, rich and light in substance; and should you visit the country in the spring, you will be surprised at finding no leaves under the trees. The reason is, the ground is so rich and damp, that they always rot and disappear with the winter, except where the soil is evidently poor for that country. It then bears the appearance of the better sort of land in Pennsylvania and Jersey, though differing widely in substance, there being no sand to be met with in the soil of Kentucky.

There is a species of flat or split lime-stone that pervades all the country, lying at unequal depths. In the rich and black-looking soil it lies near the surface, and, in general, the nearer the stone lies to the surface, the richer the land is found to be. At the same time, the stone does not, as I expected, impede the growth of the trees, as they grow every where to an amazing height, except near the salt licks, where the influence of the saline particles seems to check their growth. *American Museum, 1792.*

and to be exceeded by no country in variety.* Those of the natural growth, and which are peculiar to Kentucky, are the sugar tree, which grows in all parts in great plenty, and furnishes every family with plenty of excellent sugar. The honey locust is curiously surrounded with large thorny spikes, bearing broad and long pods, in form of peas, has a sweet taste, and makes excellent beer.

The coffee tree greatly resembles the black oak, grows large, and also bears a pod, in which is enclosed coffee. The papwa tree does not grow to a great size, is a soft wood, bears a fine fruit, much like a cucumber in shape and size, and tastes sweet. The cucumber tree is small and soft, with remarkable leaves, bears a fruit much resembling that from which it is named. Black mulberry trees are in abundance. The wild cherry tree is here frequent, of large size, and supplies the inhabitants with boards for all their buildings. Here also is the buck eye, an excellent soft wood, bearing a remarkable black fruit, and some other kinds of trees not common elsewhere. Here is great plenty of fine cane, on which the cattle feed and grow fat. This plant, in general, grows from three to twelve feet high, of a hard substance, with joints at eight or ten inches distance along the stalk, from which proceed leaves resembling those of the willow. There are many cane brakes so thick and tall that it is difficult to pass through them; where no cane grows, there is abundance of wild rye, clover, and buffalo grass, covering vast tracts of country, and affording excellent food for cattle. The fields are covered with abundance of wild herbage not common to other countries;† the Shawanese fallad, wild lettuce,

* Among the many accounts that have been given of Kentucky, none of them have done justice to the timber. Oak and locust on the flat lands are common at five feet diameter. Poplars growing on the beach lands are so common at five and six feet through, as hardly to be noticed. The beach grows to the thickness of four or five feet, and both of the last mentioned to the height of one hundred and twenty to one hundred and thirty feet. These, and the advantage of pasture in the woods, constitute the great excellence of Kentucky. *American Museum*, 1792.

† The stories told of the abundance of grass in the woods, are in many instances true. You frequently find beds of clover to the horse's knees--sometimes a species of rush-grass, commonly called the wild rye, from the similarity of its stalk to the rye so called among us; in other places we meet with large tracts of wild cane, very much esteemed by the wild and tame cattle, it continuing in verdure all the winter. There is also a species of vine, called the pea vine, from its producing a small pod, resembling that of the garden pea, of which both horses and cattle are extremely fond.

and pepper grass, and many more, as yet unknown to the inhabitants, but which, no doubt, have excellent virtues. Here are seen the finest crown imperial in the world, the cardinal flower, so much extolled for its scarlet colour; and all the year, excepting the winter months, the plains and valleys are adorned with variety of flowers of the most admirable beauty. Here is also found the tulip-bearing laurel tree, or magnolia, which has an exquisite smell, and continues to blossom and feed for several months together.

This country is richest on the higher lands, exceeding the finest low grounds in the settled parts of the continent. When cultivated, it produces in common fifty and sixty bushels per acre; and it has been affirmed by credible persons, that above one hundred bushels of good corn were produced from an acre in one season.* The first rate land is too rich for wheat till it has been reduced by four or five years cultivation.

Colonel Harrod, a gentleman of veracity in Kentucky, has lately experienced the production of small grain; and affirms, that he had thirty-five bushels of wheat, and fifty bushels of rye per acre.

In common, the land will produce about thirty bushels of wheat and rye, upon a moderate computation, per acre; and this is the general opinion of the inhabitants. We may suppose that barley and oats will increase abundantly; as yet they have not been sufficiently tried. The soil is very favourable to flax and hemp, turnips, potatoes, and cotton, which grow in abundance; and the second, third, and fourth rate lands are as

These are scattered generally through the country, according to the different soils, but are not to be met with universally. The woods, however, afford abundance of food for cattle; and in consequence of this abundance, the people pay very little attention to the making and improving pasture lands. The milk from this food is, however, thin, and both that and the butter retain a strong taste of weeds. In hot weather, their milk will turn sour in two or three hours after milking; but as the custom of the country is to use sour milk, this disadvantage is not much regretted. *American Museum*, 1792.

* The great boast of a Kentucky-man is the quantity of corn that the land will raise upon an acre, of which one hundred and seven bushels are the greatest quantity that I could find ascertained to have been produced; this, in the fall, sells for six-pence a bushel. The common produce of the soil is from fifty to eighty bushels an acre, in a favourable season. This, upon an average, is about three times the quantity we can raise on an acre in the old States; grain of this kind must therefore always be low in Kentucky, probably lower than at present, when the country comes to be more opened. *Ibid*.

proper for small grain. Every husbandman may have a good garden or meadow, without water or manure where he pleases.

The old Virginia planters say, that if the climate does not prove too moist, few soils known will yield more or better tobacco.* Experience has proved, that the climate is not too moist. Great quantities of this article have been exported to France and Spain, through New-Orleans; and it is a well-known fact, that Philadelphia is a profitable market for the Kentucky planter, notwithstanding all the inconveniencies and expenses of re-shipment at New-Orleans, under a Spanish government. What advantages then may not this country expect from a free navigation of the Mississippi, unrestrained by Spanish policy!

Iron ore and lead are found in abundance, but we do not hear of any silver or gold mine as yet discovered.

There appear to be great natural stores of sulphur and salt in this country. A spring at Boonsborough constantly emits sulphureous particles, and near the same place is a salt spring. There is another sulphureous spring upon Four Mile creek, a third upon Green river, and many others in different places, abounding with that useful mineral.

There are three springs or ponds of bitumen near Green river, which do not form a stream, but discharge themselves into a common reservoir, and when used in lamps, answer all the purposes of the finest oil.

There are different places abounding with copperas, easily procured, and in its present impure state sufficient for the use of the inhabitants; but when refined, equal to any in the world.

There is an allum bank on the south side of Cumberland river, situated at the bottom of a cliff of rocks projecting over it. In its present state it has the appearance and possesses the virtues of that mineral, and when purified is a beautiful allum.

Many fine salt springs constantly emit water, which being manufactured, affords great quantities of fine salt. There are five, which in time will become of the utmost importance, viz.

* No land appears better adapted to the culture of tobacco than that of Kentucky, and it is now become one of their staples. At present there are but few orchards; but as the country opens, they will find it their interest to plant them.—The flour I have seen made here is generally black, and not so good as might be expected. Possibly it may be the fault of the mills, or it may proceed from the richness of the ground, though it must be confessed the grain itself looks well.—*American Museum*, 1792.

the higher and lower Blue Springs, on Licking river, from some of which it is said, issue streams of brinish water—the Big-bone lick, Drennon's lick, and Bullet's lick, at Saltsburgh. The last of these licks, though in low order, has supplied this country and Cumberland with salt at twenty shillings the bushel, Virginia currency; and some is exported to the Illinois country. The method of procuring water from these licks is by sinking wells from thirty to forty feet deep. The water drawn from these wells is more strongly impregnated with salt than the water from the sea.

The Nob lick, and many others, do not produce water, but consist of clay mixed with salt particles: to these the cattle repair, and reduce high hills rather to valleys than plains. The amazing herds of buffalo which resort thither, by their size and number, fill the traveller with amazement and terror, especially when he beholds the prodigious roads they have made from all quarters, as if leading to some populous city; the vast space of land around these springs, desolated as if by a ravaging enemy, and hills reduced to plains, for the land near those springs are chiefly hilly; these are truly curiosities, and the eye can scarcely be satisfied with admiring them.

A medicinal spring is found near the Great-bone lick, which has perfectly cured the itch by once bathing; and experience in time may discover in it other virtues. There is another of like nature near Drinnon's lick.

The western waters produce plenty of fish and fowl. The fish, common to the waters of the Ohio, are a buffalo fish, of a large size, and the cat fish, sometimes exceeding one hundred weight. Trout have been taken in the Kentucky weighing thirty pounds. The mullet, rock, perch, gar fish, and eel, are here in plenty. Suckers, sun fish, and other hook fish, are abundant; but no shad or herrings. On these waters, and especially on the Ohio, the geese and ducks are amazingly numerous.

The land fowls are turkeys, which are very frequent, pheasants and partridges. The parroquet, a bird every way resembling a parrot, but much smaller; the ivory bill woodcock, of a whitish colour, with a white plume, flies screaming exceedingly sharp. It is asserted, that the bill of this bird is pure ivory, circumstance very singular in the plummy tribe. The great owl resembles its species in other parts, but is remarkably different in its vociferation, sometimes making a strange surprising noise like a man in the most extreme danger and difficulty.

Serpents are not numerous, and are such as are to be found in other parts of the continent, except the bull, the horned, and the mockason snakes. Swamps are rare, and consequently frogs and other reptiles, common to such places. There are no swarms of bees, except such as have been introduced by the present inhabitants; these have increased and extended themselves in an almost unparalleled manner of late years.

Among the native animals are the urus, or bison, called improperly a buffalo; hunters have asserted that they have seen above one thousand of these animals at the Blue licks at once; so numerous were they before the first settlers had wantonly sported away their lives. There still remains a great number in the exterior parts of the settlement. They feed upon cane and grass, as other cattle; and are innocent harmless creatures.

There are still to be found many deer, elks, and bears, within the settlement, and many more on the borders of it. There are also panthers, wild cats, and wolves.

The waters have plenty of beavers, otters, minks, and muskrats: nor are the animals common to other parts wanting, such as foxes, rabbits, squirrels, racoons, ground hogs, pole cats, and opossums. Most of the species of the domestic quadrupeds have been introduced since the settlement, such as horses, cows, sheep and hogs, which are prodigiously multiplied, suffered to run in the woods without a keeper, and only brought home when wanted.

C U R I O S I T I E S.

Amongst the natural curiosities of this country, the winding banks, or rather precipices of the Kentucky, and Dick's river, deserve the first place. The astonished eye there beholds almost every where three or four hundred feet of a solid perpendicular lime-stone rock; in some parts a fine white marble, either curiously arched, pillared, or blocked up into fine building stones. These precipices, as was observed before, are like the sides of a deep trench or canal; the land above being level, except where creeks set in, and crowned with fine groves of red cedar. It is only at particular places that this river can be crossed, one of which is worthy of admiration; this is a great large road, wide enough for waggons made by the buffalo, sloping with an easy descent from the top to the bottom of a very large steep hill, at or near the river above Lees-town.

Caves are found in this country amazingly large; in some of which you may travel several miles under a fine lime-stone

rock, supported by curious arches and pillars: in most of them runs a stream of water.

Near the head of Salt river a subterraneous lake or large pond has lately been discovered. Colonel Bowman says, that he and a companion travelled in one four hours, till he luckily came to the mouth again. The same gentleman mentions another which operates like an air furnace, and contains much sulphur. An adventurer in any of these will have a perfect idea of primæval darkness.

Near Lexington are to be seen curious sepulchres, full of human skeletons, which are thus fabricated. First on the ground are laid large broad stones, on these are placed the bodies, separated from each other by broad stones, covered with others which serve as a basis for the next arrangement of bodies. In this order they are built, without mortar, growing still narrower to the height of a man. This method of burying appears to be totally different from that now practised by the Indians.

At a salt spring near Ohio river, very large bones are found, far surpassing the size of any species of animals now in America. The head appears to have been about three feet long, the ribs seven, and the thigh bones about four; one of which is repositied in the library in Philadelphia, and said to weigh seventy-eight pounds. The tusks are above a foot in length, the grinders about five inches square, and eight inches long. These bones have attracted the attention of philosophers; specimens of them have been sent both to France and England, where they have been examined with the greatest diligence, and found upon comparison to be the remains of the same species of animals that produced those other fossil bones which have been discovered in Tartary, Chili, and several other places, both of the old and new continent. What animal this is, and by what means its ruins are found in regions so widely different, and where none such exists at present, is a question of more difficult decision. The ignorant and superstitious Tartars attribute them to a creature whom they call Maimon, who, they say, usually resides at the bottom of the rivers, and of whom they relate many marvellous stories; but as this is an assertion totally divested of proof, and even of probability, it has justly been rejected by the learned; and on the other hand it is certain, that no such amphibious quadruped exists in the American waters. The bones themselves bear a great resemblance to those of the elephant. There is no other terrestrial animal now known large enough to produce them. The tusks with which they are both furnished, equally produce true ivory. These external

Part of a Tusk



Grinder



Thigh Bone





resemblances have generally made superficial observers conclude, that they could belong to no other than that quadruped; and when they first drew the attention of the world, philosophers seem to have subscribed to the same opinion. But if so, whence is it that the whole species has disappeared from America? An animal so laborious and so docile as the elephant, that the industry of the Peruvians (which reduced to servitude and subjected to education species so vastly inferior in those qualities, as the Llama and the Paca) could never have overlooked, if he had been to be found in their country. Whence is it that these bones are found in climates where the elephant, a native of the torrid zone, cannot even subsist in his wild state, and in a state of servitude will not propagate? These are difficulties sufficient to stagger credulity itself, and at length produced the inquiries of Dr. Hunter. That celebrated anatomist having procured specimens from the Ohio, examined them with that accuracy for which he was so much distinguished; he discovered a considerable difference between the shape and structure of the bones, and those of the elephant; he observed from the form of the teeth, that they must have belonged to a carnivorous animal; whereas the habits of the elephant are foreign to such sustenance, and his jaws totally unprovided with the teeth necessary for its use; and from the whole he concluded, to the satisfaction of naturalists, that these bones belonged to a quadruped now unknown, but to which the name of Mammoth has been given, with what propriety we will not pretend to say; the race is probably extinct, unless it may be found in the extensive continent of New-Holland, whose recesses have not yet been pervaded by the curiosity or avidity of civilized man.* Perhaps nothing more

* Mr. Jefferson informs us, that a late governor of Virginia, having asked some delegates of the Delawares, what they knew or had heard respecting this animal, the chief speaker immediately put himself into an oratorical attitude, and with a pomp suited to the supposed elevation of his subject informed him, that it was a tradition handed down from their fathers, "That in ancient times a herd of them came to the Big-bone licks, and began an universal destruction of the bears, deer, elks, buffaloes, and other animals which had been created for the use of the Indians: that the Great Man above, looking down and seeing this, was so enraged, that he seized his lightning, descended to the earth, seated himself upon a neighbouring mountain, on a rock, on which his seat and the print of his feet are still to be seen, and hurled his bolts among them till the whole were slaughtered, except the big bull, who, presenting his forehead to the shafts, shook them off as they fell; but at length missing one, it wounded him in the side; whereon, springing round, he bounded over the Ohio, the Wabash, the Illinois, and, finally, over the great lakes, where he is living at this day.

will ever be discovered than the memorials above related. The following tradition existing among the natives, we give in the very terms of a Shawanee Indian, to shew that the impression made on their minds by it must have been forcible.

Col. G. Morgan, in a note to Mr. Morfe, says, "these bones are found only at the salt licks on the Ohio; some few scattered grinders have, indeed, been found in other places; but it has been supposed these have been brought from the above-mentioned deposit, by Indian warriors and others who have passed it, as we know many have been spread in this manner. When I first visited the salt lick, says the Colonel, in 1766, I met here a large party of the Iroquois and Wyandot Indians, who were then on a war expedition against the Chicafaw tribe. The head chief was a very old man to be engaged in war; he told me he was eighty-four years old; he was probably as much as eighty. I fixed on this venerable chief, as a person from whom some knowledge might be obtained. After making him some small acceptable presents of tobacco, paint, ammunition, &c. and complimenting him upon the wisdom of his nation, their prowess in war and prudence in peace, intimated to him my ignorance respecting the great bones before us, which nothing but his superior knowledge could remove; and accordingly requested him to inform me what he knew concerning them. Agreeably to the customs of his nation, he answered me in substance as follows:

"Whilst I was yet a boy I passed this road several times, to war against the Catawbias; and the wise old chiefs, among whom was my grandfather, then gave me the tradition, handed down to us, respecting these bones, the like to which are found in no other part of the country." It is as follows:

"After the Great Spirit first formed the world, he made the various birds and beasts which now inhabit it. He also made man; but having formed him very white, and imperfect, and ill-tempered he placed him on one side of it where he now inhabits, and from whence he has lately found a passage across the great water, to be a plague to us. As the Great Spirit was not pleased with this his work, he took of black clay, and made what you call a negro, with a woolly head. This black man was much better than the white man, but still he did not answer the wish of the Great Spirit, that is, he was imperfect; at last, the Great Spirit having procured a piece of pure, fine red clay, formed from it the Red Man, perfectly to his mind; and he was so well pleased with him, that he placed him on this great island, separate from the white and black men, and gave him rules for his conduct, promising happiness in proportion as they should be observed. He increased exceedingly, and was perfectly happy for ages; but the foolish young people, at length forgetting his rules, became exceedingly ill-tempered and wicked. In consequence of this, the Great Spirit created the great buffalo, the bones of which you now see before us; these made war upon the human species alone, and destroyed all but a few, who repented and promised the Great Spirit to live according to his laws, if he would restrain the devouring enemy; whereupon he sent lightning and thunder, and destroyed the whole race. In this spot, two excepted, a male and a female, which he shut up in yonder mountain, ready to let loose again, should occasion require."

"Ten thousand moons ago, when nought but gloomy forests covered this land of the sleeping sun, long before the pale men, with thunder and fire at their command, rushed on the wings of the wind to ruin this garden of nature; when nought but the untamed wanderers of the woods, and men as unrestrained as they, were the lords of the soil; a race of animals were in being, huge as the frowning precipice, cruel as the bloody panther, swift as the descending eagle, and terrible as the angel of night. The pines crashed beneath their feet, and the lake shrunk when they slaked their thirst; the forceful javelin in vain was hurled, and the barbed arrow fell harmless from their side. Forests were laid waste at a meal; the groans of expiring animals were every where heard, and whole villages inhabited by men were destroyed in a moment. The cry of universal distress extended even to the region of peace in the west, and the good spirit interposed to save the unhappy. The forked lightning gleamed all around, and loudest thunder rocked the globe. The bolts of Heaven were hurled upon the cruel destroyers alone, and the mountains echoed with the bellowings of death. All were killed except one male, the fiercest of the race, and him even the artillery of skies assailed in vain. He ascended the bluest summit which shades the source of the Monongahela, and roaring aloud, bid defiance to every vengeance. The red lightning scorched the lofty firs, and rived the knotty oaks, but only glanced upon the enraged monster. At length, maddened with fury, he leaped over the waves of the west at a bound, and this moment reigns the uncontrouled monarch of the wilderness, in despite of even Omnipotence itself."

CIVIL DIVISIONS AND CHIEF TOWNS.

Kentucky was originally divided into two counties, Lincoln and Jefferson. It has since been subdivided into nine, viz. Jefferson,

Colonel Morgan adds, "I have every material bone of the anatomy of this animal, with several jaw bones in which the grinders are entire; and several of the great tusks, one of which is six feet long, and *twenty in circumference*." Mr. Morse supposes some mistake in these last words, and observes, that probably the word *inches* ought to have been added to the *twenty*.

It has been said by Mr. Jefferson, that the grinders of the mammoth are five or six times as large as those of the elephant. Colonel Morgan says not; he observes, "I have seen the grinder of an elephant as large and as heavy as the largest of the mammoth; they are indeed thinner, deeper rooted, and differently shaped, denoting a granivorous animal, whereas the grinders of the mammoth resemble those of a wolf or dog, and shew them to have been carnivorous."

Fayette, Bourbon, Mercer, Nelson, Madison, Lincoln, Woodford, and Mason. As most of these counties are very large, it is probable that sub-divisions will continue to be made, as population increases.

The chief towns are,

LEXINGTON,

Which stands on the head waters of Elkhorn river, and is reckoned the capital of Kentucky. Here the courts are held, and business regularly conducted. In 1786, it contained about one hundred houses, and several stores, with a good assortment of dry goods. It has greatly increased since.

WASHINGTON.

This is the shire town of Mason county, and is the second town in this State.

LEES-TOWN.

Lees-town is west of Lexington, on the eastern bank of Kentucky river; it is regularly laid out, and is flourishing. The banks of Kentucky river, as before observed, are remarkably high, in some places three and four hundred feet, composed generally of stupendous perpendicular rocks; the consequence is, there are few crossing places; the best is at Lees-town, which is a circumstance that must contribute much to its increase.

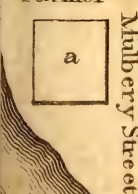
LOUISVILLE.

Louisville is at the rapids of Ohio, in a fertile country, and promises to be a place of great trade; it has been made a port of entry. Its unhealthiness, owing to stagnated waters at the back of the town, has considerably retarded its growth. In addition to these, there is Beard's-town, in Nelson county; and Harrodsburgh, in Mercer county; both on the head waters of Salt river. Danville, Boonsborough, and Granville, are also increasing towns. Several new townships are marked out; the principal of these are, Lysstra, Franklin, and Ohiopiominge. On each of these, towns are laid out, and no doubt can be entertained but that a rapid progress will be made in settling them.

The township of Lysstra contains fifteen thousand acres on the rolling fork of Salt river, in about $37\frac{1}{2}^{\circ}$ north latitude, and $85\frac{1}{2}^{\circ}$ longitude west from London.* The town is laid out on

* This tract is purchased by agents, and vested in the hands of trustees for the security of the subscribers.

Garden Street.





the South creek of the above fork, on a very eligible plan, combining every thing necessary for utility and ornament.

The streets, angles, circus and shore of the creek, to be free for public use. The streets to be one hundred feet wide. The houses to be built regularly, according to the taste of the proprietor, upon the streets running north and south, on a line twenty-five feet distant from the street, and upon the streets running east and west, on a line with the streets.

The town is divided into one hundred and eighty-eight lots, fourteen of which to be free for the gratuitants, as by a particular arrangement.

Twelve lots, in eligible situations, to be reserved for such subscribers as take ten shares, one lot to each such subscriber.

One lot to be free to the first schoolmaster, and his heirs, chosen and settled by the freeholders of the township and town.

One lot free to the president of a college, and his successors.

One lot free to the first member of Congress belonging to Nelson county, chosen after the year 1794, as a residence in Lystra, provided he builds a house thereon, in which case it is

It is divided into one hundred and fifty shares, for each of which a certificate is issued on a stamped parchment, containing a receipt for the consideration money, which at present is twenty pounds, and expressing the title to the subscriber and his heirs.

The agents are empowered to grant fourteen lots, in proper situations, to settlers gratis, and to sell fourteen lots on the east side of said gratuitous lots in the year 1794, at twenty pounds each; and fourteen lots on their north ends in the year 1795, at thirty pounds each; and fourteen lots on their south ends in the year 1796, at forty pounds each; and fourteen lots on the west sides in the year 1797, at fifty-five pounds each; and fourteen lots on the north-west corners in the year 1798, at seventy pounds each; and fourteen lots on the north-east corners in the year 1799, at ninety pounds each; and fourteen lots on the south-west corners in the year 1800, at one hundred and twenty pounds each; and fourteen lots on the south-east corners in the year 1801, at one hundred and fifty pounds each; and twelve of the remaining lots in the year 1802, at two hundred pounds each; and the last twelve lots in the year 1803, at two hundred and fifty pounds each; provided in each year a larger price than is here specified cannot be obtained; and if any lands remain unsold in the year 1804, they are to be equally divided among, and legally conveyed unto, the subscribers and their heirs as their private property.

As fast as the money arises by this re-sale of the lands, it is to be paid in equal dividends to the holders of the certificates.

The agents receive an allowance of five pounds per cent. for their trouble.

All which is more particularly set forth in the printed plan, which may be had gratis at the American Agency Office, Threadneedle-street, London.

granted to him and his heirs; otherwise, the grant is to the next chosen member who will build on these terms.

One lot free for the first senator, in like manner.

One lot free for the first judge, provided Lystra shall become a town where courts are held, and the judge shall build a house on the lot, in which case the grant is to him and his heirs, otherwise to the next judge who shall take it upon those terms.

One lot free to the first minister of the first church, whatever the persuasion may be, chosen by the free suffrages of the freeholders, and his heirs. And a lot free to the said first minister and his successors.

One lot free to the first man who shall erect a commodious hotel for the entertainment of travellers, undertake to keep it in good order and well provided with refreshments, on reasonable terms, under the regulation of the police, according to circumstances, providing for the comfort of the traveller, and guarding strictly against imposition.

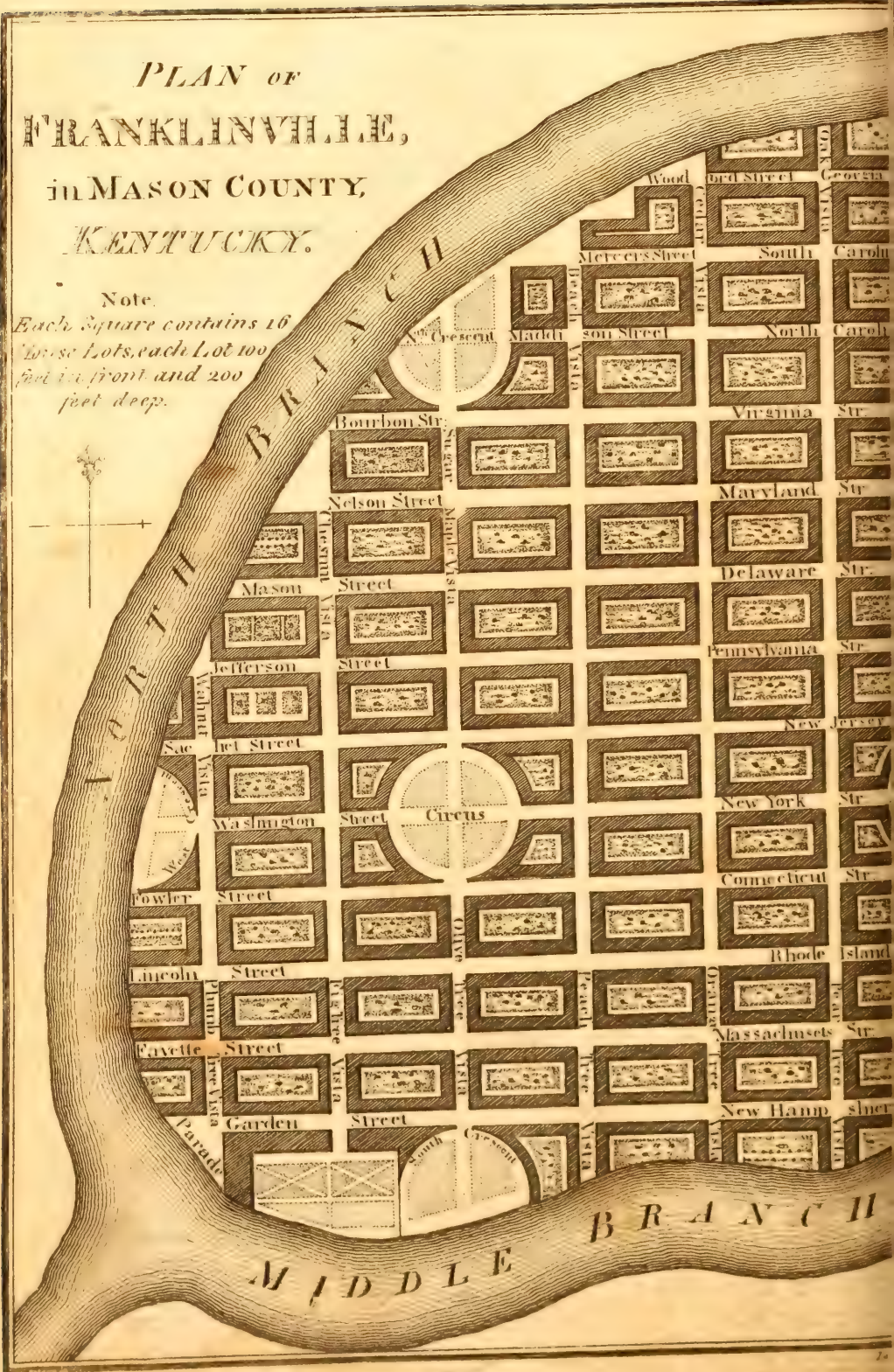
Two lots to be free lots for public granaries, to be used by merchants, who will build upon them gratis, till such time as the public occasions shall call for their appropriated use.

The angles marked in the plate *a, a, a, a*, to be appropriated as market places; and the strand of the creek to be commodiously edified with docks and landings, whenever the unappropriated public lots shall bear a price equal to the undertaking, together with such improvements of the navigation in the rolling Fork, as shall be found proper and expedient. And from these immunities, those parts of a lot formed by the Fork of Lystra creek, shall belong to the liberties of the town, to be kept in a neat manner as a common meadow, upon which every inhabitant of the town, and freeholder of the township, shall have the privilege of grazing his horse the first night of his coming into the town, or of his return from a journey, under the inspection of an overseer, taking care to do no injury to fence, or hedge, or shrub. The remaining parts shall also belong to the liberties of the town, and finally be laid out in such lots, with such restraints on the order of building as shall preserve the beauty of the whole; and these lots, together with what remains unappropriated hereby, as hereinafter mentioned, in the year 1804, if not previously sold by order of the subscribers, to be then conveyed, with what may remain, if any, of the township, to the subscribers, as their private property.



PLAN of FRANKLINVILLE, in MASON COUNTY, KENTUCKY.

Note.
Each Square contains 16
House Lots, each Lot 100
feet in front and 200
feet deep.



Eighty-four lots in the township are appropriated for the common good and sole use of the town, to be sold at such times and on such occasions as shall arise and be agreed on by the freeholders of the town, for building a church on the angle marked A, so far as ten lots shall go to that purpose; an edifice for a college on the angle marked B, so far as ten lots shall go to that purpose; an edifice for a town hall on the angle marked C, so far as ten lots shall go to that purpose; and some other public building, as a theatre or place of amusement, on the angle marked D, so far as ten lots shall go to that purpose. These edifices to be handsome and uniform, to be built with wings fronting the curve line which forms the circus; the church to be adorned with a steeple, and the other buildings with cupolas. And for doing other works of public utility, such as may arise in all times hereafter, till the whole stock thus appropriated is exhausted; but as the exigency arises, such lots are to be sold for the purpose, indiscriminately, according as they shall bear a price adequate to the undertaking.

The township of Franklin contains one hundred and sixteen thousand six hundred and fifty-six acres, and is most commodiously situated between two capital branches of that fine river which gives name to the State, the banks of which are better peopled than any other part of the State; on which lie the city of Lexington, the towns of Boonsborough, Danville, Greenville, Lees-town, &c. affording markets to the farmer for his produce. The river, about two hundred yards wide at the spot appropriated for a town already planned, to be called Franklinville, is navigable for large craft many miles above, and by the deep creeks into its interior parts for boats of considerable burthen.

In this township the farmer will have no need of manuring his grounds for many years to come, nature having already replenished the soil with a stock not soon to be exhausted. A considerable part of the land is of the prime quality, the second and third qualities are full strong enough for the various productions of the staples of life for man and beast.

Coal of a superior quality abounds within the limits, and in spots near the waters, and convenient for navigation to other parts of the country. There are two salt springs near the river, and a large quantity of copperas. The designed town is planned for the point at the confluence of the north and middle branches into the main river. Mason county in which this township stands, will doubtless be soon divided into, at least two

more, and one will form a natural angle from this point, and probably be bounded by Red river, and Franklinville become the shire town.

The streets, angels, circus and crescents, in this town, to be free to the public.

The streets, which, according to the plan, are one hundred feet wide, may be reduced to eighty feet, giving equally to the lots adjoining on each side, which are, according to the plan, one hundred feet wide and two hundred feet deep, and the houses to be built regularly, according to the taste of the proprietors, on a line twenty-five feet distant from the streets: and one moiety of each lot to be laid out in gardens, and separated from each other, and from the vistas, by simple palisades. This order of building not to be infringed.

Five hundred lots, to be drawn by some one chosen to represent the town for that purpose, to be vested in trustees for the use thereof, and sold at such times and on such occasions, as may arise and be agreed on by the suffrages of freeholders of the township and town; for building public edifices in the angles within the lines forming the circus and crescents; the churches to be adorned with handsome steeples, and the other public buildings with suitable cupolas, and built with a sufficient degree of uniformity to give those structures a handsome appearance. Also for making common sewers, aqueducts, market-places, granaries, piers and landing-places, paving the streets, planting the vistas with trees corresponding to their names, embellishing the circus and crescents, planting the public garden, lighting, watching and cleansing the town, and doing all such matters as belong to the public good, according to the public agreement; but these lots not to be sold until they bear a sufficient price for defraying the undertaking, at such times when it may be judged expedient.

One hundred and sixteen lots gratis to the subscribers, one to each thousand acres.

One hundred lots gratis to the first hundred residents.

Twenty-six lots gratis, formed in the angles of the circus and crescents, for the ministers, presidents, and other officers connected with the public buildings.

One hundred lots, to be balloted for the purpose, and vested in trustees, to be granted by the suffrages of the people, as compliments, accompanying other marks of public esteem, to such persons as are or shall become residents in the town, and have

by some singular services deserved such honours from the free-men of the township.

Four lots gratis, in suitable parts of the town, to such persons as will build thereon each a handsome and commodious hotel for the entertainment of travellers, and keep it in good order, and well provided with refreshments for such guests, on reasonable terms, under the regulation of the police, according to circumstances, providing for the comfort of the travellers, and guarding against imposition, and to be assigned by the proprietor only on these conditions.

Fifty lots, to be balloted for the purpose, and reserved for building alms-houses, houses of industry, correction, &c. as occasion may render expedient.

The vistas to keep their full breadth of an hundred feet.

The pleasure-garden to be made botanic, and be under the care of a professor, under whose discretion it may be used as a pleasure-garden, by such of the inhabitants as are willing to contribute towards its embellishment.

The remaining one hundred and thirty-nine lots to remain the private property of Mr. Abraham Fowler, who is to make good to each subscriber his full quota of land; receiving from such whose lots shall exceed the regular quantity of one hundred and twenty-five, two hundred and fifty, or five hundred acres, three shillings per acre for the surplus, and paying to those whose lots shall fall short of those respective quantities, three shillings per acre for the deficiency.

It is strongly recommended, that no place of interment be suffered within the limits of the town, but that two lots of ten acres each, without the town, be appropriated for that purpose.

No person can subscribe for less than one thousand acres, which will entitle him by ballot, 1. to a town lot of two hundred feet in length, and one hundred feet in breadth; 2. to two farms from the division nearest the town of one hundred and twenty-five acres each; 3. to one plantation from the next division of two hundred and fifty acres; and 4. to one tract in the third division of five hundred acres.

The proprietor in America, and his attorney here, are so conscious of the truth of the above statement, that they are willing to relinquish the sale, provided a considerable part of the land is not of the prime qualities, or what is termed first-rate land.

OHIOPIOMINGO, now forming, will be a most capital township and town, very advantageously situated about twenty miles

from *LYSTRA*, and thirty miles below Louisville, on the river *OHIO*, in the county of *NELSON*, in about $37^{\circ} 30'$ north latitude, containing upwards of one hundred thousand acres of prime land, and is named, in compliment to *PIOMINGO*, one of the Indian chiefs, a man greatly beloved and respected, not only by the Indian tribes but also by the whites.

A gentleman of great respectability, the proprietor of the land, and who has but just left London, has determined, at his own expense of more than one hundred and fifty pounds sterling, to erect, either in the circus or some principal part of the town, a pedestrian statue of *PIOMINGO*, habited as an Indian warrior, in the attitude of delivering an oration in favour of *LIBERTY*: the statue and pedestal, with suitable ornaments, to be of Coade's artificial stone, and will be put in hand as soon as an eminent and well-known statuary has formed a drawing and model suitable for the purpose.

It may not be improper to observe, that a number of industrious husbandmen have voluntarily offered to go out and settle at *OHIOPIOMINGO*, under the superintendence of a gentleman well versed in surveying, and competent in other respects to conduct so important an undertaking: it is also worthy of remark, that this gentleman's father, at the venerable age of ninety, yet in perfect health, has determined to accompany his children and grandchildren to this propitious spot.

The town is to contain upwards of a thousand houses, forty-three streets, a circus and several capital squares, which will be embellished with various suitable and handsome structures: each settler in the township will be entitled, in fee simple, to one town lot of an hundred feet in width, and three hundred feet in length: a field of five acres, and another of twenty acres, will also be allotted to each of them, and their farms will consist of five hundred acres each, which will be granted on lease for nine hundred and ninety-nine years; the three first years to be rent free, on condition of building a house and barn on the premises, and also of bringing under cultivation twenty acres of the land within the term, and on the fourth year the tenants are to commence an annual rent of five pounds for every hundred acres.

The town will enjoy various important privileges and immunities. A college is to be erected for the education of the youth of the tenantry, and also for such children of the Indians as they may chuse to send thither for instruction, and due care will be taken to instil into their tender minds the principles of philanthropy, moral rectitude and social order, together with such

branches of science ; as may tend to render them useful members of society, for which purpose the proprietor has appropriated fifteen hundred acres of land towards the endowment of the institution, and also suitable encouragement to such gentlemen of erudition and undoubted character as may chuse to engage in so important a charge.

The houses in Kentucky, the towns excepted, are scarcely deserving of the name ; which we shall have the less room to wonder at, when we recollect the short interval that has elapsed since the first settlement of the country.

P O P U L A T I O N .

It is impossible to ascertain, with any degree of accuracy, the present number of inhabitants ; owing to the numerous accessions which are made almost every month. In 1783, in the county of Lincoln only, there were on the militia rolls three thousand five hundred and seventy men, chiefly emigrants from the lower parts of Virginia. In 1784, the number of inhabitants were reckoned at upwards of thirty thousand. It is asserted, that at least twenty thousand migrated there in the year 1787.

In 1799, the numbers stood as follow :

KENTUCKY.

COUNTIES AND TOWNS.	Free white males of 16 years and upwards.	Free white males under 16 years of age.	Free white females.	All other free persons.	Slaves.	Total.
Fayette County, -	3241	3878	6738	30	3689	17576
Nelson, - - -	2456	2746	4644	34	1219	11099
Woodford, - - -	1767	1929	3267	27	2220	9210
Bourbon, - - -	1645	2035	3449		908	7837
Mercer, - - -	1411	1515	2691	7	1317	6941
Lincoln, - - -	1375	1441	2630	8	1094	6548
Jefferson, - - -	1008	997	1680	4	876	4565
Madison, - - -	1231	1421	2383		737	5772
Mason, - - -	431	676	952		208	2267
Lexington, in Fayette County, - - }	276	203	290	2	63	834
Washington in Madison County, - - }	163	95	183		21	462
Beard's Town, in Nelson County - }	52	49	85	1	29	216
Louisville, in Jefferson County - }	49	44	79	1	27	200
Danville, in Mercer County, - - }	49	28	51		22	150
	15154	17057	28922	114	12480	73677

What the present number of inhabitants is, it is almost impossible to form any correct estimate of, for no calculations can be made, the number of emigrations have been so great from Europe and the eastern States; but perhaps the account will not err far, if we rate them at about one hundred and seventy-five thousand.

RELIGION AND CHARACTER.

The Baptists are the most numerous sect in Kentucky. As far back as 1787 they had sixteen churches established, besides several congregations where churches were not constituted; these were then supplied by thirty ministers, and by accounts since received it appears, that their numbers have kept a proportional increase with that of the State. There are a few Episco-

Italians and Roman Catholics, and several congregations of Presbyterians; and perhaps some may be found of almost every persuasion. The Baptists were the first that promoted public worship in this State; they formed three congregations near Harbottle's Station, and engaged Mr. David Rice of Virginia as their Pastor; and afterwards formed another large congregation at Lexington, the pastoral charge of which they delivered to Mr. Rankin, also of Virginia. These were the first churches in this State.

With respect to character, the people, collected from different parts, of different manners, customs, religious and political sentiments, have not been long enough together to form an uniform national character: they are, however, in general, polite, humane, hospitable and very complaisant. Among the settlers there are gentlemen of abilities, and many genteel families, from several of the States, who give dignity and respectability to the settlement. They are in general, more regular than people who usually settle new countries.

COMMERCE.

A convenient situation for commerce is the grand hinge upon which the population, riches, and happiness of every country greatly depend. Many conceive the situation of Kentucky to be unfavourable in this respect, and are of opinion, that the best channel is from Philadelphia or Baltimore, by the way of Pittsburgh, and from thence down the Ohio; and upon account of the difficulties and expenses attending this rout, for which there is no remedy, that goods would ever be dear, and the crops not worth removing for sale.* This opinion has been reprobated, as the effect of ignorance of the trade up the Mississippi from New-Orleans, or Mantchac, at the river or gut, Iberville,

Those who are acquainted with America know the Mississippi and Ohio rivers to be the key to the northern parts of the southern continent. These are the principal channels through which

* Hitherto there has not been much more grain raised than has been consumed by the inhabitants; and the persons emigrating there, together with the trade down the river, may afford a fine prospect in theory, to individuals, but will never turn out of any solid advantage to the public of this settlement; the difficulty in returning up the river must render the voyage terrible. To make head against the stream must be done by dint of severe labour and main strength, and would require exertions which no man would ever wish to make a second time, who was not urged by the inducement of gaining a speedy fortune thereby.
Journal of a Tour in Kentucky.

that extensive region, bathed by their waters, enriched by the many streams they receive, communicate with the sea, and may truly be considered as the great passage made by the Hand of Nature for a variety of valuable purposes, and principally to promote the happiness and benefit of mankind ; among which, the conveyance of the produce of that immense and fertile country lying westward of the United States is not the least. A few observations on these rivers, and some others flowing into them, are objects submitted to the reader's attention, in order to form a just idea of the favourable commercial circumstances of this important country.

The Ohio river beings at Pittsburgh, three hundred and twenty miles west of Philadelphia, being there formed by the junction of the Allegany and Monongahela rivers, and running a winding course of south 60° west, falls into the Mississippi one thousand and seventy-four miles, by the meanders of the river below Pittsburgh. The only obstruction to navigation on this river are the rapids, as discribed before under the description of the Kentucky rivers ; but they are passed in safety when the stream is high.

The most remarkable branches composing the head waters of Ohio are Red-stone creek, Cheat river and Yohogania. These waters are navigable to a considerable distance above Pittsburgh, from November until June, and the Ohio a month longer ; but from Great Kanhawa, which is one hundred and ninety-six miles and a half below Pittsburgh, the stream is navigable most parts of the year. Down this river quantities of goods are brought, and some are conveyed up the Kentucky rivers, others on horseback or in waggons to the settled part, and sold on an average at one hundred pounds per cent. advance.

The current of the Ohio descends about two miles an hour in autumn, and when the waters are high about four miles. Those of the Kentucky rivers are much the same, and without rapids, and are of immense value to the country, affording fish and fowl, and transportation of the produce of the country to the best market. These rivers increase the Ohio more in depth than breadth. At its mouth it is not more than one and a half mile in width, and enters the Mississippi in a south-west direction with a slow current, and a fine channel. This great river, at the junction with the Ohio, runs in a south-east direction, and afterwards in a south-west, having been a little before joined by a greater river called Missouri. which, as before observed, runs in an eastward direction through Louisiana.

and afterwards communicates to the Mississippi its own muddy and majestic appearance. The depth is, in common, eight or ten fathoms, until you approach its mouth, which empties itself by several channels into the gulph of Mexico. Here the navigation is dangerous, on account of the many islands, sand-bars and logs, interspersed in its mouth, which is about twenty miles wide. This disadvantage may be remedied almost in the same manner that the stream was disconcerted. The conflict between the sea and this mighty river, which brings down with its stream great numbers of trees, mud, leaves, &c. causes them to subside and form shoals. One of these trees, stopped by its roots or branches, will soon be joined by thousands more, and so fixed, that no human force is able to remove them. In time they are consolidated, every flood adds another layer to their height, forming islands, which at length are covered with shrubs, grass and cane, and forcibly shift the bed of the river. In this manner we suppose most of the country on each side of the Mississippi, below the Iberville, to have been formed, by islands uniting to islands which, in a succession of time, have greatly encroached on the sea, and produced an extensive tract of country. If some of the floating timber at the mouths of this river were moved into some of the channels, numbers more would incorporate with them and the current being impeded in these, the whole force of the river uniting, one important channel would forcibly be opened, and sufficiently cleared to admit of the most excellent navigation.

About ninety-nine miles above Orleans is a fort, now called Mantchac by the Spaniards; formerly Fort Bute by the English, who built it. Near this is a large gut, formed by the Mississippi, on the east side, called Iberville; some have dignified it with the name of river, when the Mississippi, its source, is high. This is navigable, at most, not above four months in the year for the first ten miles: for three miles farther it is from two to six feet in autumn, and from two to four fathoms the remaining part of the way to lake Maurepas, receiving in its course the river Amit, which is navigable for batteaux to a considerable distance.

Lake Maurepas is about ten miles in length and seven in breadth; and there is a passage of seven miles between this and lake Pontchartrain.

Lake Pontchartrain is about forty miles long, twenty-four broad, and eighteen feet deep. From this lake to the sea the channel is ten miles long, and three hundred yards wide; and the water deep enough to admit large vessels through these lakes and their communications. This place, if attended to, might be

of consequence to all the western country, and the commerce of West-Florida; for it may reasonably be supposed, that the inhabitants and traders of the western country would rather trade at this place than at New-Orleans, if they could have as good returns for their peltry, and the produce of their soil; as it makes a considerable difference in their voyage, and saves labour, money and time. Experience will doubtless produce considerable improvements, and render the navigation of the Mississippi, either by these lakes, or New-Orleans, nearly as cheap as any other. That the Mississippi can answer every valuable purpose of trade and commerce, is proved already to a demonstration by experience.

There is reason to believe that the time is not far distant, when New-Orleans will be a great trading city, and perhaps another be built near Mantchac, at Iberville, that may in time rival its glory.

A prodigious number of islands, some of which are of great extent, are interspersed in this mighty river; and the difficulty in ascending it in the spring, when the floods are high, is greatly lessened by eddies or counter currents, which mostly run in the bends near the banks of the river with nearly equal velocity against the stream, and assist the ascending boats.

From New-Orleans to the falls of Ohio, batteaux, carrying about forty tons, have been rowed by eighteen or twenty men in eight or ten weeks, which, at the extent, will not amount to more than five hundred pounds expense, which experience has proved to be above one third of that from Philadelphia. It is highly probable that in time the distance will be exceedingly shortened by cutting across bends of the river.

Charlevoix relates, that at Coupee, or Cut point, the river formerly made a great turn, and some Canadians, by deepening the channel of a small brook, diverted the waters of the river into it. The impetuosity of the stream was so violent, and the soil of so rich and loose a quality, that in a short time the point was entirely cut through, and the old channel left dry, except in inundations, by which travellers save fourteen leagues of their voyage. The new channel has been sounded with a line of thirty fathoms, without finding bottom. When the distance is shortened, which we believe may readily be done; the expenses of a voyage from New-Orleans to the falls of Ohio will be very inconsiderable. It is known by experience that forty tons of goods cannot be taken to the falls of Ohio from Philadelphia, under sixteen hundred pounds expense; but by improvements on the Mississippi, with the conveniences of the mechanical boats, goods can be brought from New-Orleans to the falls for the tenth part

of that expenſe ; and if they are ſold at one hundred pounds per-cent. now, when brought from Philadelphia at expenſes ſo great, what may the merchant afford to ſell his goods at, who brings them ſo much cheaper ? Beſides, the great advantages ariſing from the exporting of peltry, and country produce, which never can be conveyed to the eaſtern ports to any advantage. It is evident alſo that the market from which they receive imports, muſt conſequently receive their exports, which is the only return they can poſſibly make.

By ſtating the commerce of Kentucky in its proper terms, we find the expenſes ſuch, that we conclude with propriety, that that country will ultimately be ſupplied with goods as cheap as if ſituated but forty miles from Philadelphia.

But perhaps it will be replied, New-Orleans is in the poſſeſſion of the Spaniards, who, whenever they pleaſe, may make uſe of that port, and ſome others they have on the Miſſiſſippi, to prevent the navigation and ruin the trade. The paſſage through Iberville is alſo ſubject to the Spaniards, and, beſides, inconvenient ; that ſtream continuing ſo ſhort a time, and in the moſt diſadvantageous ſeaſon.

It will certainly be abſurd to expect a free navigation of the Miſſiſſippi, whiſt the Spaniards are in poſſeſſion of New-Orleans; to ſuppoſe it, is an idea calculated to impoſe only upon the weak. They may perhaps trade with the Americans upon their own terms, while they think it conſiſtent with their intereſt, but no frienſhip in trade exiſts when intereſt expires ; therefore, when the weſtern country becomes populous and ripe for trade, ſound policy tells us, the Floridas muſt belong to the Americans. According to the article of the definitive treaty, they are to have a free and unmoleſted navigation of the Miſſiſſippi; *but experience teaches mankind that treaties are not always to be depended upon,* the moſt ſolemn being broken.* Hence we learn, not to put much faith in treaties with any of the old governments of Europe.

Although the Iberville only admits of a ſhort and inconvenient navigation, yet if a commercial town were built there, it would be the center of the weſtern trade : and a land carriage of ten or twelve miles would be counted no diſadvantage to the merchant. Nay, in time, a canal may be broke through the gut of Iberville, which may divert the water of the Miſſiſſippi that way, and ren-

* Article 8th of the late definitive treaty, ſays, The navigation of the Miſſiſſippi river, from its ſource to the ocean, ſhall forever remain free and open to the ſubjects of Great-Britain and the citizens of the United States.

der it a place of the greatest consequence in America; but this important period is reserved for futurity. The trade of Kentucky is already improving; we have mentioned that tobacco has been exported to France and Spain in great quantities through New-Orleans. They have also erected a paper mill, an oil mill, fulling mills, saw mills, and a great number of valuable grist mills. Their salt works are more than sufficient to supply all their inhabitants, at a low price. They make considerable quantities of sugar from the sugar trees. They have a printing office, and publish a Weekly Gazette. Labourers, particularly tradesmen are exceedingly wanted here.

L I T E R A T U R E.

The legislature of Virginia, while Kentucky made a part of that State, made provision for a college in it, and endowed it with very considerable landed funds; and a library for its use was forwarded thither by the Rev. Mr. John Todd of Virginia, (*after obtaining the consent of the Rev. Dr. Gordon*) while an inhabitant of the Massachusetts State. This library was mostly formed in the following manner: An epistolary acquaintance having commenced between Mr. Todd and Dr. Gordon, through the influence of their common friend, the Rev. Mr. Samuel Davis, long since deceased; a letter was received about the end of 1764, or beginning of 1765, from Mr. Todd, in which he expressed a desire of obtaining a library and some philosophical apparatus, to improve the education of some young persons, who were designed for the ministry. Dr. Gordon being then settled at London, upon application obtained a few annual subscriptions, with several donations of money, and of books, which were not closed till after March 1769. During that period he received in cash, including his own subscription, eighty pounds two shillings and six-pence. The late worthy John Thornton, Esq. contributed fifty pounds of it, by the hand of the Rev. Mr. (afterwards Dr.) Wilson, who also gave in books ten pounds. Among the contributors still living, beside Dr. Gordon himself, are the Rev. Mr. Towle, Messrs. Fuller, Samuel, and Thomas Statton, Charles Jerdein, David Jennings, Jonathan Eade, Joseph Ainsley, and John Field of Thames street.

Of the money collected, twenty-eight pounds ten shillings was paid to the late Mr. Ribright, for an air pump, microscope,

telescope, and prism, thorough good, but not new. Cases, shipping, freight, insurance, &c. at four different periods, came to eight pounds eleven shillings and six-pence. The forty-three pounds one shilling was laid out to the best advantage in purchasing a variety of books, which, with those that were given, are supposed to make the main part of the Lexington library.* Schools are established in the several towns, and in general regularly and handsomely supported.

RIGHTS OF LAND.

The proprietors of the Kentucky lands obtained their patents from Virginia, and their rights are of three kinds, viz. Those which arise from military service, from settlement and pre-emption, or from warrants from the treasury. The military rights are held by officers, or their representatives, as a reward for services done in one of the two last wars. The settlement and pre-emption rights arise from occupancy. Every man who, before March 1780, had remained in the country one year, or raised a crop of corn, was allowed to have a settlement of four hundred acres, and a pre-emption adjoining it of one thousand acres. Every man who had only built a cabin, or made any improvement by himself or others, was entitled to a pre-emption of one thousand acres, where such improvement was made.

In March, 1780 the settlement and pre-emption rights ceased, and treasury warrants were afterwards issued, authorising their possessor to locate the quantity of land mentioned in them, wherever it could be found vacant in Virginia.

The mode of procedure in these affairs may be instructive to the reader. After the entry is made in the land-office, there being one in each county, the person making the entry takes out a copy of the location, and proceeds to survey when he pleases. The plot and certificate of such survey must be returned to the office within three months after the survey is made, there to be recorded; and a copy of the record must be taken out in twelve months, after the return of the survey, and produced to the assistant register of the land-office in Kentucky, where it must lie six months, that prior locators may have time and opportunity to enter a caveat, and prove their better right. If no caveat

* As this account of the library is essentially different from that given by Mr. Morse, and every other writer we have met with, the editor thinks it right to inform the public, that he inserts the above at the desire of the Rev. Dr. Gordon himself.

is entered in that time, the plot and certificate are sent to the land-office and three months more are allowed to have the patent returned to the owner.

C O N S T I T U T I O N .

By the constitution of this State, formed and adopted in 1792 the powers of government are divided into three distinct departments; legislative, executive, and judiciary. The legislative power is vested in a General Assembly, consisting of a Senate and House of Representatives; the supreme executive in a governor; the judiciary, in the supreme court of appeals, and such inferior courts as the legislature may establish. The representatives are chosen annually by the people; the senators and governor are chosen for four years, by electors appointed for that purpose; the judges are appointed during good behaviour, by the governor, with advice of the Senate. An enumeration of the free male inhabitants, above twenty-one years old, is to be made once in four years. After each enumeration, the number of senators and representatives is to be fixed by the legislature, and apportioned among the several counties according to the number of inhabitants. There can never be fewer than forty, nor more than one hundred representatives. The Senate at first consisted of eleven members; and for the addition of every four representatives, one senator is to be added. The representatives must be twenty-four years old; the senators twenty-seven; the governor thirty; and all of them must have been inhabitants of the State two years. The governor can hold no other office. The members of the General Assembly, none but those of attorney at law, justice of the peace, coroner, and in the militia. The judges, and all other officers, must be inhabitants of the counties for which they are appointed. The governor, members of the General Assembly, and judges, receive stated salaries out of the public treasury, from which no money can be drawn, but in consequence of appropriation by law. All officers take an oath of fidelity to discharge the duties of their offices, and are liable to impeachment for misconduct. Elective officers must swear that they have not used bribery in obtaining their elections. All free male citizens, twenty-one years old, having resided in the State two years, or in the county where they offer to vote, one year, have a right to vote for representatives, and for electors of senators and governor, and are privileged from arrest, in civil actions, while attending that business. The General Assembly meets on the first Monday in November each year, unless sooner convened by the governor. Each House chooses

its speaker and other officers, judges of the qualification of its members, and determines the rules of its proceedings, of which a journal is kept and published weekly, unless secrecy be requisite. The doors of both Houses are kept open. The members of the legislature, while attending the public business, are privileged from arrests in civil actions, and may not be questioned elsewhere for any thing said in public debate. Impeachments are made by the lower house, and tried by the upper. All revenue bills originate in the House of Representatives, and are amendable by the Senate, like other bills. Each bill passed by both Houses is presented to the governor, who must sign it if he approve it; if not, he must return it within ten days to the house in which it originated, if it be not returned, or if, when returned, it be re-passed by two thirds of both Houses, it is a law without his signature. The governor has power to appoint most of the executive officers of the State; to remit fines and forfeitures, and grant reprieves and pardons, except in cases of impeachment: to require information from executive officers; to convene the General Assembly on extraordinary occasions, and adjourn them in case they cannot agree on the time themselves. He must inform the legislature of the state of the Commonwealth; recommend to them such measures as he shall judge expedient; and see that the laws are faithfully executed. The speaker of the Senate exercises the office of governor in case of vacancy. The legislature has power to forbid the farther importation of slaves, but not to emancipate those already in the State without the consent of the owner, or paying an equivalent. Treason against the Commonwealth consists only in levying war against it, or in adhering to its enemies, giving them aid and comfort.

The declaration of rights asserts the civil equality of all; their right to alter the government at any time; liberty of conscience; freedom of elections, and of the press: trial by jury; the subordination of the military to the civil power; the rights of criminals to be heard in their own defence; the right of the people to petition for the redress of grievances, to bear arms, and to emigrate from the State. It prohibits unreasonable searches and seizures; excessive bail confinement of debtors, unless there be presumption of fraud; suspension of habeas corpus writ, unless in rebellion or invasion; ex post facto laws; attainder by the legislature; standing armies; titles of nobility and hereditary distinction.

In addition to what we have already said of this State, we subjoin the following topographical description of the western

territory, extracted from the letters of Mr. G. Imlay, whose long residence in the country furnished him with the most ample means of arriving at a perfect knowledge of those subjects on which he wrote.

“ In casting your eyes over the map of America, you will discover that its western (or middle) country is divided from the Atlantic country by a chain of mountains which rise in the remote parts of the States of New-York and New-Jersey, and run in a south-westerly course, until they are lost in the flat lands of West-Florida. The western country is those parts which are watered by the streams running into the Mississippi.

“ It is about fifty miles over the Allegany mountains, crossing the route which General Braddock took from fort Cumberland near the Potomack, at the descent into the country of Red-stone on the Monongahela, the southern branch of the Ohio. This river rises in the same mountain, considerably to the southward runs nearly parallel with it, the opposite way, upwards of one hundred miles, and is navigable for boats nearly to its source. The whole of this country beyond the mountain is extremely fertile, well watered, and abounding with all kinds of timber calculated for building houses, boats, cabinet work, &c. &c. The sugar maple tree is intermixed in great quantities. From the foot of the mountain it is about fourteen miles to Red-stone Old Fort, which is on the banks of the Monongahela, and the usual place of embarkation of people coming down the Ohio, who travel Braddock's road: from thence to Pittsburgh is about fifty miles by water. Large tracts of flat land lay all along upon the banks of this river, from the Old Fort to Pittsburgh, which are capable of being made into extensive and luxuriant meadow ground.

“ This country is populous, it being the oldest settlement and made immediately after taking Fort du Quesne. The Yohogania empties itself into the Monongahela, about sixteen miles above its junction with the Allegany river: the country on this river is more uneven, but in the vallies the soil is extremely rich. Near to Pittsburgh the country is well peopled and there, as well as in Red-stone, all the comforts of life are in the greatest abundance. Flour is manufactured in as good a style as in any part of America; and butter, cheese, bacon, and every kind of provisions can be had in the greatest quantity. The whole country abounds in coal, which lies almost upon the surface of the ground; the hills opposite Pittsburgh upon the bank of the Monongahela, which are at least three hundred feet high appear to be one solid body of this mineral.

“ This must become in time the most valuable grazing country in all America from the fertility of its soil, its capability of being formed into extensive meadows, and its proximity to the mountains which attract the clouds, and produce that moisture so necessary to grass;—besides which, its situation is about three hundred miles from Philadelphia, about two hundred and forty from Baltimore, and about two hundred and twenty from the federal city on the Potomack, a distance which is too great to carry by land the bulky articles of husbandry ; but to which cattle may be driven with the greatest ease.

“ This country has derived no inconsiderable advantage from the settlement of Kentucky, and the other settlements that are making on the Ohio and Mississippi, the great road of migrating from the northern States lying through it ; and, indeed, it is most convenient, both from Maryland and Virginia, at all seasons of the year, provided that there be any thing bulky to carry, the passage being for the greatest part by water, and the Potomack navigable, a few places excepted, to fort Cumberland ; all of which obstructions will be removed in a few years by canals that are cutting. From fort Cumberland it is about sixty miles land carriage to Red-stone Old Fort ; but so friendly has nature been to this country, though it is without seas, yet the rivers run in such directions, that there is scarce any place in all the back parts of America where art may not reduce the land carriage to a very small distance. I cannot speak upon so general a subject definitively ; but I mean to be understood within fifteen leagues. It is asserted from the best authorities, that the land carriage between the Potomack and Ohio may be reduced to less than twenty miles.

“ Such is the progression of things in this country, while there was apparently no market for its superfluous productions, that every article has sold extremely well, in consequence of the number of emigrants who have been continually passing down the Ohio.

“ Down from Pittsburgh the country is flat on the banks of the river ; but a little distance from them it is considerably broken, particularly on the north-western side. Much good land, however, is interspersed on the south side as far as the approach to the Little Kanhawa, where the nature of the soil seems reversed, and the good land is then found on the western side upon the Muskingum. There are some strips of rich land upon the Little Kanhawa ; but farther up the river, the country is broken and sterile, producing scarce any other timber than the fir-tree, or pine and knotty black oaks, which are generally deemed symptoms of a bad soil. This tract of bad land extends quite into the

mountains in a southern direction, and runs south-westerly as far as Great Sandy river, with little or no variation, except on the bottoms of the Great Kanhawa, which are extensive and rich. The bottoms on the Ohio are every where extensive and luxuriant. On the western side of the river, the country beyond the rich vein of land on the Muskingum is only tolerable, on this side of the head waters of the Scioto, which are succeeded by as fine a body of land as the imagination can paint. This extends considerably nearer to the Ohio, and running westward quite to the Miami, now approximates its banks, and displays in its verdure and variety of majestic forests, all that beauty and richness which have been so much celebrated by travellers who have passed through them. The country on the eastern, except on the banks of the rivers, is indifferent. There is a body of good land on Great Sandy; but leaving that in a south-westerly course, high, rugged, and broken hills arise, which will hardly ever be capable of cultivation: these hills extend between thirty and forty miles, and open into the fine lands of Kentucky.

“The east side of the Ohio, for about ten or twenty miles below Whealing, which is about one hundred below Pittsburgh, is generally well settled. There are few settlements on the opposite shore until you come into the Muskingum, and the country now wears the face of a wilderness on both sides of the river, there being no habitations worth notice, except at the mouth of Great Kanhawa, until we arrive at Lime-stone.

“Every thing here assumes a dignity and splendor I have never seen in any other part of the world. You ascend a considerable distance from the shore of the Ohio, and when you would suppose you had arrived at the summit of a mountain, you find yourself upon an extensive level. Here an eternal verdure reigns, and the brilliant sun of latitude 39° , piercing through the azure heavens, produces in this prolific soil an early maturity, which is truly astonishing. Flowers full and perfect as if they had been cultivated by the hand of a florist, with all their captivating odours, and with all the variegated charms that colour and nature can produce, here, in the lap of elegance and beauty, decorate the smiling groves. Soft zephyrs gently breathe on sweets, and the inhaled air gives a voluptuous glow of health and vigour that seems to ravish the intoxicated senses. The sweet songsters of the forests appear to feel the influence of this genial clime, and in more soft and modulated tones warble their tender notes in unison with love and nature. Every thing here gives delight; and in that mild effulgence which beams around us, we feel a glow of grati-

tude for that elevation our all bountiful Creator has bestowed upon us. Far from being disgusted with man for his turpitude or depravity, we feel that dignity nature bestowed upon him at the creation, but which has been contaminated by the base alloy of meanness, the concomitant of European education; and what is more lamentable, is, that it is the consequence of her very laws and governments.

“From Lime-stone to Licking creek the country is immensely rich, and covered with cane, rye grass, and the native clover. The cane is a reed that grows to the height frequently of fifteen or sixteen feet, but more generally about ten or twelve feet, and is in thickness from the size of a goose quill to that of two inches diameter; sometimes, yet seldom, it is larger: when it is slender it never grows higher than from four to seven feet; it shoots up in one summer, but produces no leaves until the following year. It is an evergreen, and is, perhaps, the most nourishing food for cattle upon earth. No other milk or butter has such flavour and richness as that which is produced from cows which feed upon cane. Horses which feed upon it work nearly as well as if they were fed upon corn, provided care is taken to give them once in three or four days a handful of salt, otherwise this food is liable to heat, and bind their bowels. The rye grass, when it arrives to maturity, is from two feet and a half high, to three and a half, and the head and beard resemble the real rye, and sometimes produce a small grain, long and slender, not unlike rye. Whether cultivation would bring it to the same perfection, I can form no idea; it is, however, certain, that it is a very good and valuable grass. The clover is in no respect different from the clover in Europe, but as it is more coarse and luxuriant. There is a variety of other kinds of grass, which are found in different places; but I have only mentioned the two former, they being esteemed the most valuable.

“In order to travel into the interior parts of the State, the route lies across the branches of Licking creek. There are several of them which take their rise in the high hills of Great Sandy, and the spurs of the Allegany mountain; they traverse a most delightful country, and form a junction a small distance below the Lower Blue lick.*

The country from the lick to the Ohio is considerably broken, but generally rich, and continues uneven, except on the banks of the

* There are two salt springs upon Licking, both of which are now worked with success.

river quite to the mouth of the Kentucky, which is about one hundred and ten miles below the mouth of Licking creek, by water, and seventy above the rapids of the Ohio. Between the mouths of Licking and Kentucky lies the Great-bone lick, which is justly celebrated for the remarkable bones which are found there, and which gave name to the place.

“ After passing the Blue lick, the soil, if possible, increases in richness. From thence to Danville is about fifty miles. Lexington lies about midway, and is nearly central of the finest and most luxuriant country, perhaps, on earth. From Lexington to Leesburgh is about twenty miles; to Boonsborough it is about twenty; the Upper Blue lick nearly thirty. This square, which is nearly fifty miles, comprehends entirely what is called first rate land. Leesburgh lies on the Kentucky, about twenty miles from its mouth by land, and nearly forty by water. The country between that and the Ohio is broken, but rich, though it is not deemed a valuable body of land. The Kentucky is bounded every where by high rocky precipices, that are generally two hundred feet and upwards perpendicular, and which make its passes difficult. Few places on it have any bottom land, as the rock rises mostly contiguous to the bed of the river; which confinement, after heavy rains, renders it very formidable from the impetuosity of its current. On ascending the banks of this river, the land on either side is equally good for some distance above Boonsborough; but adjacent to the mountains from whence the river rises, the country becomes broken, sterile, and of little or no value. Boonsborough lies on the Kentucky, about sixty miles above its mouth by land, and about one hundred and thirty by water. From Leesburgh down the river on the south side, for about ten or twelve miles, the hills are considerably high and steep; but when you pass the waters of Drinnon's Lick creek, you fall into a body of good champaign land, which extends, with little variation, to the rapids of the Ohio. From Leesburgh to Danville, the country for the first twenty miles is of an inferior rate of land for this country; but farther on, you get into the rich country I have mentioned, comprehended within the square of fifty miles.

“ Large bodies of good land lie on every side of Danville for twenty miles and upwards; but in the course from thence to the rapids of the Ohio, on the waters of Salt river, which takes its name from a salt spring called Bullit's lick that is on its banks, about twenty miles from the mouth of the river, the country is in some places broken into ridges of hills, which are in general good land, but not well watered. As you approach the rapids it becomes more level, better watered, and the soil more fertile.

The country of Beargrafs is beautiful and rich; as, indeed, is the land on Goose and Harrod's creeks. In the fork of the Ohio and Salt river, which forms a junction about twenty miles below the rapids, the country is flat, and interspersed with small lakes or ponds, occasioned by the extreme lowness of the banks of the Ohio in this fork, which, when flooded, overflows the country, and the water fills these ponds periodically, or as often as those inundations happen, and which are frequent from December until April.

"The rapids of the Ohio lie about seven hundred miles below Pittsburgh, and about four hundred above its confluence with the Mississippi. They are occasioned by a ledge of rocks that stretch across the bed of the river from one side to the other, in some places projecting so much, that they are visible when the water is not high, and in most places when the river is extremely low. The fall is not more than between four and five feet in the distance of a mile; so that boats of any burthen may pass with safety when there is a flood; but boats coming up the river must unload, which inconvenience may very easily be removed by cutting a canal from the mouth of Beargrafs, the upper side of the rapids, to below the lower reef of rocks, which is not quite two miles, and the country a gentle declivity the whole way.

"The situation of the rapids is truly delightful. The river is full a mile wide, and the fall of water, which is an eternal cascade, appears as if nature had designed it to shew how inimitable and stupendous are her works. Its breadth contributes to its sublimity, and the continually rumbling noise tends to exhilarate the spirits, and gives a cheerfulness even to sluggards. The view up the river is terminated at the distance of four leagues, by an island in its center, which is contrasted by the plain on the opposite shore, that extends a long way into the country: but the eye receding, finds new beauties, and ample subjects for admiration in the rising hills of Silver creek, which stretching obliquely to the north-west, proudly rise higher and higher as they extend, until their illumined summits imperceptibly vanish. Clarkville, on the opposite shore, completes the prospect, and from its neighbourhood, and from the settlement forming upon the officers land, a few years must afford a cultivated country, to blend appropriate beauty with the charms of the imagination. There lies a small island in the river, about two hundred yards from the eastern shore; between which and the main is a quarry of excellent stone for building, and in great part is dry the latter part of summer. The banks of the river are never overflowed

here, they being fifty feet higher than the bed of the river. There is no doubt but it will soon become a flourishing town; there are already upwards of two hundred good houses built. This town is called Louisville.

“ In leaving the rapids in a south-westerly direction, the country is flat, it bordering upon the country I have described in the fork of the Ohio and Salt rivers. After passing the main branch of the Salt river near Bullit’s Lick, ten miles distant, in the fork of the north and south branches, the country becomes broken and hilly, but between which and the Cumberland road, that leads from the upper parts of Kentucky, there is a considerable extent of fine land; but travelling a few leagues farther southward, you arrive at extensive plains, that extend upwards of one hundred and fifty miles in a south-west course, and end only when they join the mountainous country. Some few clumps of trees, and a grove here and there, are the only obstructions to a boundless horizon. It is pleasant to behold the deer bounding over the scraggy shrubs which cover the earth. While the setting sun gilds those extensive plains, the mild breezes of a summer’s eve, playing upon the enraptured senses, softens the heart to love and friendship. Unperceived, upon some eminence, you may enjoy the sports of wild animals, which here rove unconcerned lords of the field. Heavens! what charms are there in liberty! Man born to enslave the subordinate animals, has long since enslaved himself. But reason at length, in radiant smiles, and with graceful pride, illumines both hemispheres; and FREEDOM, in golden plumes, and in her triumphal car, must now resume her long lost empire.

“ We have now arrived upon the waters of Green river; at the mouth of which, and between that and the Ohio, lies Henderson’s grant of twelve miles square. The plains extend beyond the head waters of this river quite into the limits of North-Carolina; but at the mouth, and for forty miles above, there is a large proportion of good land, particularly upon Panther creek. From the mouth of Green river up the Ohio to Salt river, the land upon the banks of the Ohio is generally fertile and rich; but leaving its banks you soon fall into the plain country, which is considered as little better than barren land; however, it is most likely that it will prove excellent for sheep to feed upon, the climate being nearly the same as that of Spain, where the finest wool in Europe is produced. And though the land is not reckoned valuable in this country, on account of its comparative sterility, yet it is of a superior quality to great part of the soil in the lower parts of Virginia, the Carolinas, and Georgia. It

abounds with hazel, which, it is well known, never grows kindly in a poor soil.

“ The native strawberry is found in these plains in the greatest abundance, as are likewise plums of different sorts; and, if we can form any idea of the native grape that grows spontaneously here, and what the same soil is capable of producing when they are cultivated, it would appear that no climate or soil in the world is more congenial to the vine, for I have never tasted more delicious grapes; and it is the opinion of some judicious foreigners, who have visited these genial regions, that as good wine as can be made in any part of the globe, might be produced from the native grape properly cultivated. There is nothing more common than to meet with a pleasant wine made here by the settlers, who know nothing of the use of vats, or the degree of fermentation necessary to the perfection of the art of wine-making. But I flatter myself some progress will be made in this business, as several foreigners have long had it in agitation to undertake it.

“ The country between Green and Cumberland rivers is generally rich, and finely watered. There is in it a most valuable lead mine, and several salt springs; and between Green and Salt rivers there are two of a bitumen, which, when analyzed, is found to be amber. But, so much do we stand in need of chymists, and mineralists, that we remain ignorant of the properties and value of many fossils which have been discovered; and many continue unknown, I apprehend, from the want of curiosity of men, whose only object seems to be cultivation, and the science of government. Perhaps these are the most essential to the happiness of mankind in the wild state which this country is in. Arts appear to follow population. Necessity has been the mother of invention, it is true; but from the attainment of that perfection to which we have arrived in arts and philosophy, wisdom and science must go forward; and it is physically impossible for man again to degenerate to barbarism.

“ When the greatest merit consists in the exercise of the most useful and appropriate talents, I think it is likely that the ingenuity of men will feel a more lively stimulus to the exercise of invention from the love of fame, the love of mankind, and regard to their own dignity, than it ever yet experienced from necessity. While odious distinctions exist, and men are rewarded in proportion to their servility, human nature must be robbed of half its manliness, and consequently men will be slothful. How many drones do we observe in every part of Europe, who feed upon the industry of the necessitous, or who work only as it is

necessary to their existence! Such have been the effects of the factitious duties of man in that hemisphere, that every thing has become perverted; and governments, instead of securing happiness to men, have only tended to aggrandize individuals, and thus has flowed in that debasement of character which has marked half the inhabitants of Europe with little more dignity than the monsters of the forest.

“Cumberland river rises among the mountains, considerably to the north-east, and, after its several branches have joined it, runs a long way south, and enters the limits of North-Carolina. After a course of half a degree within those limits, it turns to the north-west, and empties itself into the Ohio, at some distance above its junction with the Mississippi. The Tennessee runs into the Ohio, not a long way below the mouth of Cumberland. The Tennessee is the most important of the southern branches of the Ohio. Its northern fork, called Holston, rises in the country of the same name, and, after passing through Nolachucky, is joined by the main or south branch. This branch rises in the remote parts of the State of Georgia, and, after traversing the borders of the Cherokee country, is joined by the Holston branch, when it is called the Tennessee, from thence it runs south-westerly, quite through the limits of North-Carolina, and approaches the head waters of the Mobile, which empties itself into the gulf of Mexico. In its course, it is very rapid thus far: from the material declivity of the high country, which from mountains gradually sink into a flat, there is a number of falls, but none of them considerable. It now turns again to the northward, and from its lazy motion it is obvious that there is very little fall of water from this to the Ohio. This turn constitutes what is called the Great Bend of the Tennessee, or Muscle Shoal from the number of shoals in this part of the river that are covered with these shell-fish. The river is here from two, to three and a half miles wide. Its importance will consist in its being the most convenient inlet from the upper parts of Virginia and the Carolinas to the Mississippi, it being navigable for boats of forty tons burthen from Holston, the falls excepted, where carrying places will answer until there are canals made, which can be done with very little expence.

Holston is a narrow strip of country, surrounded on every side by mountains; but there is a passage which winds through them so as to admit of a passage this way, and down the river, without any difficulty of bad roads whatever. Should you continue your route by land in the road to Kentucky, you would have several mountains to pass, and at least two hundred miles of bad road.

After you leave the plains which extend into the Cumberland country, in your course to the Tennesse, the country is somewhat broken, but mostly rich. Great part of the land lying between these rivers, and the Ohio and between Cumberland and Green rivers, was in military grants, made by Virginia to their officers and soldiers; and is esteemed a valuable situation for its proximity to the junction of the Ohio and Mississippi. Their grants extend as low on the Mississippi as the partition line between Virginia and North-Carolina; all of which is a beautiful country: and the banks of the river, which are very high, prevent it from overflowing, which is not the case a great way lower down.

The land in the Great Bend of the Tennessee is very fine; but when you approach the country of the Chickesaws, it becomes broken, light, and sandy: and, as you extend to the southward, I have been informed the soil grows still lighter, and, except a large body of good land on the Mississippi, and the bottoms of the several streams that run into the Gulf and the Mississippi, it is little better than West Florida, which has been celebrated in Europe for its fertility; but so fine a country have I been endeavouring to describe to you, that judging by comparison, the people in Kentucky and Cumberland look upon that as an indifferent soil.

“In ten years more, perhaps, a settlement will be formed sufficiently populous to become a federal state in the country into which I am now going to advance; the limits of which, from the confluence on the Mississippi and Ohio to Detroit, is between five and six hundred miles; and taking the medium distance between Pittsburg and the mouth of the Ohio, across to the Mississippi from the Ohio, is very little less. The inhabitants of this immense district do not, including French, amount to five thousand. The country in this fork (if I may so call it) is various. Immediately in the fork the land is flat, and liable to overflow; but as you advance on either river the banks rise, and the country expanding, displays a luxuriant soil for a long distance above the Wabash on the Ohio side, and quite to the Illinois on the Mississippi side, which is about two hundred and thirty miles above its junction with the Ohio, and twenty above the mouth of Missouri. This country lies nearly in the same parallel of latitude of Kentucky. From the mouth of the Wabash, the bottoms on the Ohio are extensive and extremely fertile, as is the country from thence to Post St. Vincent; but towards the rapids of the Ohio, beyond the bottoms of this river, the country is considerably broken, and the soil in some places light and indifferent. After leaving Post St. Vincent, in the route to the Illinois coun-

try, you soon fall into those extensive plains which have been described in such glowing colours by Hutchins. This is certainly a beautiful country, and the immense number of deer, elk, and buffalo, which are seen grazing in those natural meadows, render them highly enchanting. The air in this climate is pure, and the almost continual unclouded sky tends, not a little to charm the senses, and to render even wildness delightful. The country between Post St. Vincent and Kaskaskias is flat and plain, with little variation. As you ascend the Illinois river, the soil grows more fertile, and on either side you find immense forests.

“Detroit lies between lat. 42° and 43° upon the straits which communicate between lake St. Clair and lake Erie, considerably to the westward of Pittsburgh. The country lying between them is not remarkable for any thing but being a wilderness. The soil and climate are such as would entitle it to the reputation of a fine country in any part of Europe, except in winter, when the frost is extremely severe, but less intense than that of Canada. Quebec lies nearly in the same latitude as Paris, and from the description which the Emperor Julian has given of the winters he quartered there, during his command in Gaul, there seems to be little difference between the winters of France at that period, in respect to cold, and the present winters of Canada. Perhaps the extent of continent lying to the north-west, and the immense lakes of fresh water which cover it, will not admit of the climate of that part of America being so rapidly meliorated, as the climate of Europe has been by cultivation. However, it is certain, that as the country has been more opened in America, and thereby the rays of the sun have acted more powerfully upon the earth, these benefits have tended greatly already to soften the winter season: so that peopling Canada, for which we are much obliged to *you*, is a double advantage to *us*. First, it is settling and populating a country, that must, sooner or later, from the natural order of things, become part of our empire, and immediately meliorating the climate of the Northern States. But to return to Detroit. Our course from thence to the head waters of the Miami is south-westerly. The country for some distance is flat, and the soil heavy and damp; but, upon the waters of those rivers it is beautiful, and abounds in the gifts of nature.

“The communication between lake Erie and the Ohio by water this way, will be up the southern branches of the lake, and by short passages you arrive upon the waters of the Great Miami, Scioto and Muskingum, which are navigable when flooded. It must be observed, that the rivers I have been mentioning are not

navigable, throughout the year, for boats of above ten or fifteen tons. Great part of the country between this and the Wabash is champaign ; but in travelling towards the rapids of the Ohio you pass considerable plains, and then fall into a broken and hilly tract of poor land, that continues with little variation until you approach the rapids, when all the variety and charms which this river produces, present themselves again. From Detroit to the rapids is nearly four hundred miles.

“ The rapid population of the western country has not only astonished America itself, but it must amaze Europe, when they enter into the views and increase of this growing empire. The first settlement on the western waters by the English was in 1760, and under the influence of almost continual Indian wars, that settlement (I am now speaking of the upper settlement on the Ohio) now contains not less than an hundred thousand souls. The State of Kentucky did not make a permanent settlement before 1780, which now contains not less than an hundred thousand. The Cumberland settlement began about this time, but it was at least three years afterwards before there was security given to that settlement, and there are settled about fifty thousand souls more. Besides the settlement in the great bend of the Tennessee, which will join them in their separation from North-Carolina, the settlement of Nola Chucka and French-broad, made on the branches of the Tennessee in the years 1782, 1783, 1784, and 1785, contain between thirty and forty thousand souls ; several other settlements are forming at the Iron banks on the Mississippi, besides those upon the western side of the Ohio, which, including the inhabitants at Post St. Vincent and the Kaskaskias (I judge from the best information) do not fall short of fifty thousand. I have not mentioned the number in the settlement of the great bend of the Tennessee, as I have not been able to collect any satisfactory information respecting them : but I suppose the aggregate number of souls in the western country is very little, if at all, short of four hundred thousand, including the settlements of Holston, Clinch river and Powel's valley, which, taken together, may amount to seventy thousand souls, and which are properly on the western waters.

“ The settlements on the western side of the Ohio, have been greatly harrassed and retarded by the Indian war, which has continued with little variation since 1785 ; but the vigorous measures which their depredations have obliged Congress to adopt, must end with a permanent peace, or in a few years their provocations will lead to the extirpation of the whole of the Miami and Illinois tribes. Their prowess and determined resolution

will, no doubt, considerably annoy our army, which, having been mostly recruited from the Atlantic country, are not acquainted with such dexterity and courage, or indeed habituated to their manner of fighting: but our numbers have grown too considerable; for defeats only invigorate our measures, while the loss of every man, to nations whose population is so extremely tardy as that of the savages of America, is a lamentable consideration.

“ In the peopling this country new States will naturally arise, and thus, in contemplating the continent of America, we may form an adequate idea of what will be the magnitude of its federal empire. The upper settlement on the Ohio, though more populous than the settlement of Cumberland, is not likely to become a separate State so soon. The greatest part of it is within the limits of Pennsylvania, and not so remote from the capital of that State as the Cumberland settlement is from the capital of North-Carolina. The intercourse is continual, and the productions of the country, or at least their cattle may be driven to Philadelphia, &c. as I have observed before; and their influence is not sufficient to procure them an act of separation, should they desire it. In the case of North-Carolina and Cumberland there is little or no communication between them, nor is it to be expected that it ever can be the interest of either to continue the connection; therefore it is most likely, that district will follow Kentucky in the links of the great federal chain.

“ I must now proceed upon conjecture, as there are no definite limits prescribed by the federal government for the lines of demarkation, which are to be the different boundaries or limits of new States that will arise. However, it is easy, by consulting natural boundaries, to form a pretty just idea where will be their different divisions. I have already remarked, that Kentucky and Cumberland are divided by a line in latitude $36\frac{1}{2}^{\circ}$, which will be the boundary of Cumberland to the northward. The mountains will most likely be its eastern limits; its southern limits will be, either the partition line continued between North-Carolina and Georgia, or it will run southerly, until it strikes that ridge of hills which divides the Tennessee country from the country of the Chactaws; thence a due west course to the Mississippi, or following some one of those branches which rise in those hills, and pursuing its course to that river. This will comprehend a district of country of nearly two hundred miles in length from east to west, and nearly one hundred and fifty from north to south. I cannot speak here with accuracy, as it is that part of all the western country which is least known.

The country upon the head waters of the Tennessee, stands next in the list of advancement. This country includes the settlement of Holston, the settlement of Clinch, and the settlements of Powell's valley, which are part in Virginia, and part in North-Carolina; besides the settlements of Nola Chucka and French-broad. This last settlement will be extended to the borders of the Cherokee country, which will bind this State to the southward. Its western boundary will be Cumberland mountain, which will divide it from the States of Kentucky and Cumberland. Its northern limits will be the ridges of hills that divide the waters of the Tennessee and the Great Kanhawa, and its eastern boundary will be the high hills that divide the eastern from the western waters in this part of America, which are called in Virginia the North mountains, and which continue their course through the Carolinas. This State will be in extent upwards of two hundred miles from north to south, and the average width from east to west nearly an hundred and fifty.

“ This country has mountains on every side but the south-west, and is interspersed with high hills in most parts of it. The valleys are extremely fertile, and every where finely watered. The climate in the upper part of the country is not so temperate as that of Kentucky, though it lies in the same latitude, which is owing to the neighbouring mountains. Many parts of this district are well settled, and cultivation was brought to such considerable perfection, that the inhabitants had it in contemplation to become independent seven years since, under the distinction of the State of Franklin. Its population is not only considerable, but its respectability in every consideration will very soon intitle it to the rank of a distinct State: though it may require some time to effect a unity of sentiments, and a consolidation of its various and detached settlements into that order which the organs of government require.

“ Before I leave this side of the Mississippi, I must beg leave to digress, and shew what will be the probable destination of the Indian nations, who live between the southern limits of the country I have been mentioning, and the Floridas, and which may amount to thirteen thousand, inclusive of men, women and children.

“ The Cherokees are about two thousand five hundred; the Creeks three thousand five hundred; the Chacktaws are about six thousand; and the different vagrant nations may amount to a thousand more.

“ The settlements making in the upper parts of Georgia, upon the fine lands of the Oconee and Okemulgee rivers, will

in a very few years bid defiance to them in that quarter. The Georgian troops have already defeated them, and forced them to be quiet. The settlement of French-broad, aided by Holston, have nothing to fear from them; and the Cumberland is too puissant to apprehend any danger. The Spaniards are in possession of the Floridas, how long they will remain so, must depend upon their moderation and good manners, and the settlements at the Natchez and above, which will soon extend to the southern boundaries of Cumberland; so that they will be completely enveloped in a few years. Our people will continue to inroad upon them on three sides, and compel them to live more domestic lives, and assimilate them to our mode of living, or cross to the western side of the Mississippi.

“The Genesee country lies upon the waters that run into lake Ontario, and it is expected will be peopled as soon as the Six Nations of Indians are peaceable. This is a very rich and fertile tract of country, lying in the remote parts of New-York, bounded by Pennsylvania to the south-east, by the lakes to the north-west, and high hills and a wilderness from the Ohio country. I have hitherto omitted taking notice of it, as not properly belonging to the western country; but as I am going to proceed to partition the country west of the Ohio into separate States, I thought it most consistent to keep up the chain of connection; and without mentioning this district, there would be a chasm between New-York and the uppermost State upon the waters of the Ohio.

“Let us now return to the Ohio. That ridge of hills which divides the waters of this river from that of the lakes running south-westerly, until they run north-westerly, and divide the sources of the Wabash and Illinois rivers from the southern branches of the lakes, will most likely mark the limits to the west, of the upper States upon the western side of the Ohio. The ridge of hills which divides the waters of the Allegany river from those of the Genesee, will bound it to the north, the Allegany river and the Ohio to the east, and the Muskingum to the south. The next State, I should form between the Muskingum and Scioto, the Ohio, and that ridge of hills between the sources of these rivers and those of lake Erie. The third between the Scioto, the Great Miami, the Ohio, and the same ridge of hills. The country lying between the Miami, Wabash, the Ohio, and the same hills, I would put into another State; and the country lying between the Wabash, Ohio, Mississippi, and Illinois rivers, I would establish into a fifth State.

“Between the mouth of the Illinois river and waters of lake Michigan, lies a district of country equally fertile with any part of the western country; but in the progression of our settlements, it will be some years before any settlement can be formed there, except in the fork of the Mississippi and Illinois, which may be erected into a State, by running a line from a point, latitude $42^{\circ} 30''$ upon the Mississippi, in such a direction as to strike the head branches of the Illinois. But it is most likely that the country on the Mississippi and Missouri will be settled before this district, though it is considered as the empire of Spain. However, I will not be so indecorous as to parcel out the territories of other nations; it is sufficiently presumptuous to have gone so far as I have.

“I have now marked out the imaginary boundaries of six new States, exclusive of those on the eastern side of the Ohio, the Genesee settlement, and without including the country between the northern limits of Kentucky and Pittsburgh, or the country between Niagara, Detroit, and the sources of those rivers which run into the Ohio.

“The upper settlement on the eastern side of the Ohio, will most likely follow the Cumberland and Holston in its independence. In peopling the new States, I conclude the lowermost will be first settled, and consequently the first to be admitted into the federal government. The district of country that will be last settled, in all probability, between the Ohio, the lakes, and the Mississippi, to the south of St. Anthony's fall, is perhaps that which lies between Niagara and Detroit, and extending to the ridge of hills which divides the waters of lake Erie and Ohio, by reason of its damp and cold soil. The surrender of the forts of Niagara and Detroit, which I understand is about to be done, may increase the settlements upon the borders of lake Erie; but I think it is not likely that inhospitable clime will find inhabitants, while the genial regions of the Mississippi are in a great measure uninhabited.

“It is next necessary to take notice how, and in what probable time these States will be inhabited. The first settlement upon the Ohio, and the progress made in agriculture, were extremely tardy. But it is necessary to recollect, that America was not only in an infant state at the conclusion of the war in 1763, but that the continual wars with the Indians greatly retarded the progress of that settlement; and if the same obstructions have been given to the settlements on the western side of the Ohio, it is equally certain that the exhausted condition of the finances of the United States, until within a year and a half

past, did not permit them to take those vigorous measures necessary to their tranquility; and that permanent settlements on that side of the river, and the increase of the necessaries of life, which are now in greater abundance in the western country than in any other part of America, will enable them to support their situation with infinitely more ease than when we were obliged to bring almost every thing for use over the mountain.

“ I have estimated the number of souls on the western waters at four hundred thousand. I should suppose from the disposition to early marriage, which is general, and the extraordinary fecundity it is observed every where prevails, with the addition of the emigrants who may be expected from the eastern States, that the inhabitants will double once in fifteen years for the next sixty years to come at least, which in the first fifteen years will be equal to peopling four or five of these States; and I think we may expect to see, at the end of thirty years, the whole country I have been describing inhabited.

“ It is impossible that we can experience any thing like poverty, for no country, perhaps, upon the globe is so rich in the comforts and necessaries of life. As to wars, we can have none after a few years more are past. The Spaniards may put us to some inconvenience for a few years to come; but in doing this, they will not only risk the loss of New-Orleans, but the whole of Louisiana, which they consider as the key to Mexico. Thus secured from wars, and the inland navigation of the country not subjecting us to material losses in that business; with the propensity to early marriages, produced by the simplicity and innocence of youth, tutored under the pure maxims of virtue and reason; it cannot be considered as a sanguine calculation, when we add the additional consideration of the probable number of emigrants we may receive, that our population will double once in fifteen years.

“ In the western territory is found all the variety of soil and climate necessary to the culture of every kind of grain, fibrous plants, cotton, fruits, vegetables, and all sorts of provisions. The upper settlements on the Ohio produce chiefly wheat, oats, barley, rye, Indian corn or maize, hemp and flax. The fruits are apples, pears, cherries, peaches, plums, strawberries, raspberries, currants, gooseberries, and grapes; of culinary plants and vegetables, there are turnips, potatoes, carrots, parsnips, cymeline or squash, cucumbers, pease, beans, asparagus, cabbages, brocoli, celery and sallads; besides which there are melons and herbs of every sort. The provision consists of beef, pork, mutton, veal, and a variety of poultry, such as ducks;

Muscovy ducks, turkeys, geese, dunghill fowls, and pigeons. The superfluous provisions are sold to the emigrants, who are continually passing through those settlements in their route to the different districts of country, which I have enumerated. Some considerable quantity of spirits distilled from rye, and likewise cyder, are sent down the river to a market. in those infant settlements where the inhabitants have not had time to bring orchards to any perfection, or have not a superfluity of grain to distil into spirits. The beef, pork, and flour, are disposed of in the same way. The flax and hemp are packed on horses and sent across the mountains to the inland towns of Pennsylvania and Maryland, and, as I hinted before, in a few years, when grazing forms the principal object of those settlers, they will always find a market for their cattle at Philadelphia, Baltimore, and Alexandria.*

“These settlements might produce a considerable quantity of sugar, but hitherto what they have made has served for little more than home consumption, as every part of the back country, from latitude 42° to 36° and upon the Mississippi, as far north as latitude 45° , produces an abundance of the sugar maple tree as would be equal to furnish sugar for the inhabitants of the whole earth; and to send to any of the market towns on the Atlantic is too far to be profitable, until the canals of the Potomack shall have been finished. The country produces also all the pot herbs which are common in Europe: several kinds of nuts grow in the forests such as chesnuts, hickory, and black walnuts. The mountains, hills, and the uninhabited parts abound in deer, wild turkies, and a species of grouse, called by the Americans promiscuously partridge or Pheasant. There is an abundance of wild fowl, as, indeed is the case in every part of the western country.

“Linen and woollen cloths, leather, and hats, for home consumption, are manufactured with considerable success. The two first articles are only made in families for their own use; but the latter are made by men of profession in that business, and are of a quality that would not disgrace the manufactures of Europe. Blacksmiths work of all sorts, even to making fire arms, is done there; as is also cabinet work, wheel-wright, mill-wright, house carpentry, joinery, shoe-making, &c. &c. in short, all the trades, immediately necessary to the promotion of the comforts of new settlements, are to be found here.

“After passing to the southward of latitude 40 degrees, the climate becomes favourable to the culture of tobacco. It will, no doubt, grow farther to the north; but neither its flavour is so aro-

To which may be added WASHINGTON.

natic, or the crop so certain or productive. Indeed, the farther south tobacco grows, generally the finer in quality : hence it is, that the saegars of Cuba are so much admired for their peculiar scent, and the Oronoko for its mildness. However, this is of little consequence to any country, as it is certain no cultivation is so pernicious to the soil, and of so little real advantage to the cultivator. It continually impoverishes the land; and every additional season, instead of producing riches to an estate, tends to beggar it : every vintage of its growth is misery and devastation, and no soil but one as prolific as that of the Nile, would be capable of producing it for any length of time, according to the system which has been pursued in Virginia and Maryland. However, the whole of the Ohio and Mississippi country below latitude 40 degrees, is better adapted to produce tobacco in quantity, than any other country upon the face of the globe.

“ Kentucky produces, besides tobacco, all the different kinds of grain that I have described in the upper settlement ; all the fruits, with the addition of apricots and nectarines ; these and peaches grow here to very great perfection, particularly when planted upon a light soil, which should always be the case when it can be found ; but however extraordinary it may appear, it is not often the case in this district of country.

“ Those culinary plants, vegetables, &c. I have enumerated above, are produced in the whole western country. In some parts they grow to greater perfection than in others, as in this the cucumber, turnips, peas, and many others are much finer than I ever saw any where beside. The cantilope melon is only to be equalled by those in Persia. We are not at the trouble and expense of forcing; every thing put into the ground of the vegetable kind grows in a most wonderful manner.

“ The soil is uncommonly favourable to hemp and Indian corn, I have known twelve hundred weight of the former produced from an acre of ground, and as much as one hundred bushels of the latter. This has not only been done from an uncommon fertile spot, but there are large bodies of land adjoining, which are equally prolific. I believe that were I to mention upon an average the produce of the whole country, it would be found to be nearly as follows;

Hemp per acre	-	-	-	-	800 cwt.
Indian corn, or maize, ditto	-	-	-	-	60 bushels.
Wheat, ditto	-	-	-	-	30 ditto.
Barley, ditto	-	-	-	-	40 ditto.

Oats ditto	- - - -	50 bushels.
Clover and timothy grass, ditto	-	25 cwt.

“ Besides hemp and flax for manufacturing, cotton is cultivated with considerable success, particularly in the southern parts of the State and Cumberland ; and no doubt in a few years, when our settlements extend to the Natchez, cotton will be produced in as great perfection as in the East or West-Indies. No soil or climate can be more congenial to this plant than the regions on the lowermost parts of the Mississippi. We have in our power to promote the culture of silk also. The mildness of the climate, and the great quantity of mulberry trees, which are every where interspersed in our forests, render this matter extremely easy ; but how far this will be politic, when the use of silk is going out of fashion, is a matter that requires some consideration. Cotton has supplied its place, and its superior excellence I apprehend will always make it a more profitable manufactory.

“ The growth of wool will form an important consideration with us. The plains I have described extend quite to the mountains, so that sheep here may have every advantage which the flocks of Spain enjoy. If we can form an idea from the samples of wool produced in many parts of the country, we may conclude that our most sanguine expectations will be fully answered.

“ The buffaloe is nearly driven out of Kentucky ; some are still found upon the head waters of Licking-creek, Great Sandy, and head waters of Green river. Deer abound in the extensive forests, but the elk confines itself mostly to the hilly and uninhabited places.

“ The rapidity of the settlement has driven the wild turkey quite out of the middle countries, but they are found in large flocks in all our extensive woods.

“ Amidst the mountains and broken countries are great numbers of grouse ; and since the settlement has been established, the quail by following the trail of grain which is necessarily scattered through the wilderness, has migrated from the old settlements on the other side the mountain, and has become a constant resident with us. This bird was unknown here on the first peopling of the country.

“ There is a variety of wild fowl in every part of this State, particularly teal, and the summer duck. The latter breeds with

us: its incubation is always in temperate climes, which is the reason of its being called the summer duck.

“The productions of Cumberland are nearly the same as those of Kentucky. The quality of tobacco is perhaps something better; but the climate being considerably warmer, is not so favourable to wheat and barley, nor does grain grow there so luxuriantly as with us.

“The country below Cumberland soon becomes warm enough for indigo and rice; and perhaps these articles in a few years will be cultivated on the Mississippi with as much success, if not more, than they ever were in South-Carolina or Georgia; particularly the former, as the soil on the Mississippi is infinitely more luxuriant than any in the Carolinas. Some essays were made in this business previous to the late war, but the object was abandoned on the destruction of the settlement made below the Natchez.

“Oranges, and other tropical fruits, grow at the Natchez, and some distance above, to considerable perfection. There are a variety of nuts that grow both in Kentucky and Cumberland, some of which are common to both; the most remarkable of them is the Pecan; all of which have been noticed both by Caryer and Jefferson. Grapes, plums, gooseberries, and strawberries, grow also spontaneously in the southern parts of Kentucky, and in most parts of Cumberland.

“The produce of the western country will be nearly the same in the same parallels of latitude throughout; so that comparing my imaginary States with the settled country south-east of the Ohio, you will be able to form a just idea of what they will be capable of producing. But to comprehend the object of the commerce of this country, it is first necessary to contemplate it, abounding in all the comforts of life, limited in its variety of climate only by what is not desirable; with a soil so prolific, a navigation so extensive, and a security so permanent, from being inland, that it seems this vast extent of empire is only to be equalled for its sublimity, but by the object of its aggrandizement.

“Provisions, tobacco, and raw materials, will constitute the first articles of our trade. Such a quantity of beef, pork, bacon, butter, cheese, &c. &c. may be furnished from this country as will one day, no doubt, furnish the West-India islands, and afford relief to the miserable Chinese, whose scanty portion of rice

is only sufficient to keep soul and body together. Our mountainous countries must always prove excellent ranges for herds of cattle; the grass, in the summer, affording sufficient food to fatten them, without the expense of cultivated meadows, and the winters are seldom severe as to require any other food than the cane and pea-vine.

“The navigation of this country has been much talked of. The distance from one place to another has been computed with some degree of accuracy, and the various experiments which have been made confirm the opinion that its difficulty is merely imaginary.

“The common mode of descending the stream is in flat-bottomed boats, which may be built from fifteen to five hundred tons burthen. But, as far as I have been able to judge, I should suppose, that about fifty or sixty tons burthen would be the most convenient, wieldy, and consequently safe, particularly when the waters are very high; for in such cases the rapidity of the current makes it difficult to manage an unwieldy mass with facility. These boats are built of oak plank, with a certain proportion of breadth to their length, i. e. nearly as twelve feet to forty tons. They are covered or not as occasion may require. The object is to build them as cheap as possible, for their unwieldiness prevents the possibility of their returning, and they can only be sold as plank.

“Several of these boats setting out together, let us suppose five, ten, fifteen, or twenty, of sixty tons burthen each, which would require each six hands to navigate them: ten boats then of sixty tons each will employ sixty hands, which will be equal to navigate up the stream three boats of five tons each, and would be more than sufficient to bring back the cargo that the produce of the ten boats would purchase: as the articles we export are gross and bulky, while we want only in return superfine goods: the coarser goods of every sort will always be manufactured in the country. We also make our own salt, sugar, spirits, malt liquor, and shall soon make our own wine. These boats must be worked up with steam and sails.

“The invention of carrying a boat against the stream by the influence of steam, is a late improvement on philosophy by a Mr. Rumsey of Virginia, whose ingenuity has been rewarded by that State with the exclusive privilege of navigating those boats in her rivers for ten years; and as this grant was given previous to the independence of Kentucky, the act of separation guarantees his right. Some circumstance or other has prevented his bringing them into use. However, there can be no doubt of his

scheme, for the Assembly of Virginia had the most unequivocal assurances before they gave the privilege, in a certificate signed by General Washington and Man Page, Esquire: setting forth, that they had seen a boat, they believed to be constructed by Mr. Rumsey, ascend a stream without the aid of manual labour, but without mentioning the operating cause, which has since appeared to be steam. If this principle should fail (and from such authority I do not conceive how it is to be presumed,) I flatter myself that philosophy is capable of supplying the place in the appropriation of some one of the secrets with which mechanics abound.

“ In taking a retrospective view of the world, we are for a moment surprized when we recollect that some thousands of years had elapsed before printing was invented; and that the only way of accumulating the copies of art and genius was by the tardy method of transcribing; and that the art of navigation was for nearly as long a time devious, and regulated by no certain laws, the stars and head lands of different countries being the only guides to the adventurous mariner, who often perished when the heavens were obscured. O Liberty! how many blessings hast thou brought to America! Man in promulgating his opinions, now finds security under the wings of an established freedom; and the dismal dungeon, which eclipsed the luminous mind of the celebrated Italian, would now be erected into a school for him to lecture in, instead of a prison to bewail the miserable ignorance and depravity of his fellow-creatures. Truth and reason have led to this melioration of manners—it will lead to more benefits to mankind.—But should we still be obliged to row our boats against the stream, *it is not only practicable, but easy.*

“ The frequent turnings in the Mississippi produce in every bend eddy water; which, with the advantage the wind affords (that blowing the greater part of the year from the south-west, and directly up the windings of the river, by reason of the vacancy between the banks and rising forests on either side, affording a channel for the current of the air) is sufficient with sails, keeping as much as possible in the eddy water, to carry a boat fifty miles a day up the stream.

“ To account for those winds philosophically would be extremely easy; but as it is a circumstance notorious from the testimony of voyagers in the Mississippi, and the Ohio, I presume the test of experience will be preferred to any philosophical disquisition upon the subject.

“ Should this navigation prove too tedious, and no improvements appear likely to be made in it, the importing into the

country may be facilitated by another channel, from the gulf of Mexico up the Mobile, which is a lazy current; from the principal branch of which there is but a short passage to a branch of the Tennessee, when you will have the advantage of the stream quite into the Ohio. I have enumerated this circumstance merely for the sake of information; for I have not the smallest doubt of the eligibility of the navigation of the Mississippi, which is proved from the experiments which are daily making.

“The distance from Pittsburg to the Muskingum is one hundred and seventy-three miles; to the Little Kanhawa one hundred and seventy-eight; to the Great Kanhawa two hundred and eighty-five; to Great Sandy three hundred and forty two; to the Scioto three hundred and ninety; to Lime-stone five hundred; to the Little Miami five hundred and ten; to Licking creek five hundred and twenty-four; to the Great Miami five hundred and fifty; to the Great-bone creek five hundred and eighty-two; to the Kentucky six hundred and twenty-six; to the rapids seven hundred and three; to Salt river seven hundred and twenty-three; to Green river nine hundred and twenty-two; to the Wabash one thousand and nineteen; to Cumberland river one thousand one hundred and thirteen; to the Tennessee one thousand one hundred and twenty-six; to the Mississippi one thousand one hundred and eighty-three; from thence to New-Orleans is about one thousand and five.

“I have mentioned that it is about two hundred and thirty miles from the mouth of the Ohio up the Mississippi to the mouth of the Missouri, and about twenty from thence to the Illinois, which is navigable for batteaux to its source. From thence there is a portage only of two miles to Chicago, which is also navigable for batteaux to its entrance into lake Michigan, which is a distance of sixteen miles. This lake affords communication with the river St. Lawrence through lake Erie, passing Niagara by a portage of eight miles. The lakes Erie and Michigan are navigable for vessels drawing six and seven feet water. This is one of the routes by which the exchange of commodities between the northern and southern parts of this empire will be facilitated.

“In continuing the plan of intercourse, it will be found extremely easy to pass through lake Ontario to Wood creek; up Wood creek, and by a portage of about three miles, you arrive at a creek, which in three miles more brings you to Fort Edward upon the Mohawk river, a branch of Hudson's river. There are several carrying places between that and its junction with Hudson; but very little labour would remove them, and which I

have no doubt but the State of New-York will be judicious enough to set early about. It is certain they have ordered surveys to be made, and plans are forming for the the removal of those obstructions. It has been long in embryo with them.* It was impossible a plan of so much utility could escape that sage and penetrating politician General Schyler, whose vast estate lies mostly in that part of America.

“There are also portages into the waters of lake Erie from the Wabash, Great Miami, Muskingum, and Allegany, from two to sixteen miles. The portage between the Ohio and Potomack will be about twenty miles when the obstructions in the Monongahela and Cheat rivers are removed, which will form the first object of the gentlemen of Virginia when they have completed the canal on the Potomack.

“The obstructions to the navigation of the Great Kanhawa are of such magnitude, that it will require a work of ages to remove them; but if ever that should be done, there wil be an easy communication between that and James river, and likewise with the Roanoake, which runs through North-Carolina. But this is an event too remote to deserve any consideration at present.

“All the rivers in this country of sixty yards wide and upwards, are navigable almost to their sources for flat-bottomed boats during their floods, and for batteaux the greater part of the year, the Great Kanhawa and little Miami excepted. The Tennessee has a considerable fall where it passes through Cumberland mountain, where there must be a portage also. From thence it is navigable quite to Holston.

“The rapids of the Ohio are no obstruction in high water to boats going down the river, and indeed batteaux may pass almost at any time. There are two small rapids in the Wabash between its mouth and St. Vincent's, but they are no impediment to navigation, except at times of low water. The Kaskaskias is a small river which runs into the Mississippi below the Illinois, and is navigable a considerable way above the plains. The Mississippi is navigable to St. Anthony's falls, without any obstruction. Carver describes it as navigable above them as far as he travelled. We have too little knowledge of the Missouri

* That State passed an Act of Assembly in July 1792, for removing all the obstructions between Hudson's river and lake Ontario; by which means, when it is done, there will be an inland navigation, taking its various courses of nearly two thousand miles in extent.

to form any decided opinion of the extent of its navigation. It is however certain, that it is a more powerful stream than the Mississippi; and in entering that river, it triumphantly rushes across, and its turbid waters, unmixed, seem to disdain a connection so inferior. From the best information that we have been able to collect, it is navigable for twelve or fifteen hundred miles above its mouth without obstruction; and I think it is not unlikely, that in settling the country towards its source, we shall find it is not remote from the sources of the streams running into the Pacific ocean, and that a communication may be opened between them with as much ease as between the Ohio and Potomack, and also between the settlements on the Mississippi and California. This circumstance is the more likely to happen, as it does not appear that the ridges of hills which divide the waters of the Pacific ocean from the waters of the Mississippi, are either so high or so rugged as the Allegany mountains.

“ You will observe, that as far as this immense continent is known, the courses and extent of its rivers are extremely favourable to communication by water; a circumstance which is highly important, whether we regard it in a social or commercial point of view. The intercourse of men has added no inconsiderable lustre to the polish of manners, and, perhaps commerce has tended more to civilize and embellish the human mind, in two centuries, than war and chivalry would have done in five.

“ The federal government regulating every thing commercial, must be productive of the greatest harmony, so that while we are likely to live in the regions of perpetual peace our felicity will receive a zest from the activity and variety of our trade. We shall pass through the Mississippi to the sea—up the Ohio Monongahela and Cheat rivers, by a small portage, into the Potomack, which will bring us to the Federal city on the line of Virginia and Maryland—through the several rivers I have mentioned, and the lakes to New York and Quebec—from the northern lakes to the head branches of the rivers which run into Hudson’s bay into the Arctic regions—and from the sources of the Missouri into the great south sea. Thus in the center of the earth, governing by the laws of reason and humanity, we seem calculated to become at once the emporium and protectors of the world.

“Frequent rains in the latter end of the autumn produce floods in the Ohio, and it is an uncommon season when one of those floods does not happen before Christmas. If there is much frosty weather in the upper parts of the country, its waters generally remain low until they begin to thaw : but, if the river is not frozen over, which is not very common, there is always water sufficient for boats of any size from November until May, when the waters generally begin to subside ; and by the middle of June, in most seasons, they are too low for boats above forty tons, and these must be flat-bottomed. The frost seldom continues so long as the middle of February, and immediately upon its breaking, the river is flooded ; this flood may in a degree subside, but for no length of time ; and it is from that period until May that the boats generally come down the river. The distance of descending is in proportion to the height of the water ; but the average distance is about eighty miles in twenty-four hours, and from sixty to one hundred are the extremes ; so that the mean time of going in a flat-bottomed boat from Pittsburg to the rapids, is between eight and nine days, and about twenty days more to New Orleans ; which will make a passage from Pittsburg to that place nearly a month. The inundations of the Mississippi commence something later than those of the Ohio ; but it is very certain they begin in March, and subside in July. This is the most proper time to ascend the river, as you avoid the shoals, have finer weather, but above all, when the water is high you have stronger eddies ; and with taking these advantages, and with dexterous watermen, you may proceed fifty-miles a day, which will bring you back to the rapids of the Ohio in forty days, making a large allowance for contingencies.

“The articles of sugar and salt, though not absolutely necessities of life, have become, from habit, so essential, that I doubt if any civilized people would be content to live without them. The extensive climate of this country, I believe, is no where warm enough for the cultivation of the sugar-cane with success ; and to import it would be too expensive by reason of its great weight ; but nature has superseded that necessity in the supply of the sugar maple-tree. It has been long known that sugar could be made from the juice of this tree ; but from the imperfect knowledge of the business of sugar-making, the samples from this liquid were such as promised no great expectations in future experiments : however, the necessity which the people were under of making it, or doing without sugar, proved, that with care and proper management, it could be made equal to the finest sugars of the West-Indies or Brazil. Some samples shewn to a su-

gar refiner in Philadelphia, which astonished him, produced several instructions in the art, which occasioned immediate success. The people began to treat the sugar-trees more tenderly : and instead of chopping a large gap in their trunk, as had always been the practice, and which was sufficient to destroy a less tender tree the juice was found to ooze as effectually from an incision made with a screw auger of three quarters of an inch diameter but this was the smallest of all the improvements. All the means made use of in the West-Indies for the perfection of the art were soon ascertained and practised : so that the country is not only equal to supply itself with sugar, but might with increase of hands, supply the inhabitants of the globe.

“ The sugar maple-tree not only grows in the greatest abundance throughout this country within the limits I have mentioned, but it is known to be the hardiest, and the most difficult to destroy, of all the trees in our forests, the beech not excepted, by the planters, who have a method of chopping or girdling the trunks of trees about one foot and a half above the ground, in order to kill them, and thereby they prevent their crops from being shaded.

“ It is known, that old trees produce the most and the richest juice ; and it is also known, that trees which have been used for years are better than fresh trees. It is a common remark, that whenever you see a black tree of this sort, it is a sure sign it is a rich one. The blackness proceeds from the incisions made in the bark by the pecking of the parroquet, and other birds, in the season of the juice rising, which oozing out, dribbles down its sides, and stains the bark, which, in the progression of time, becomes black.

“ I have mentioned these particulars with a view to prevent your falling into the general error, that the resource of making sugar from the maple will soon be destroyed from the very nature of producing it; believing, as many do, that it is impossible for the tree to be able to bear the annual wounds which are necessary to be made in its trunk in order to draw off the juice : and that a few years must necessarily extirpate them; now, so far from there being any danger of that, experience has shewn, the longer that they are used in a proper manner, the more plentiful and rich will be their juice to a certain age : which will be in proportion to the life of those trees. No exact estimation can be made of that ; but I conclude their decay is not earlier than other trees.

“ The season of tapping is mostly about the middle of February in Kentucky ; but not until the latter end of the month, about

Pittsburg in the remote parts of Pennsylvania, on the headbranches of the Sutchanna, and Delaware, and in the State of New York. Frosty mornings and bright sunshine are necessary to produce copious exudations. The season continues in this climate about six weeks, when the juice is found to be too thin and poor to make sugar; but it is still capable of making molasses, spirits by distillation, vinegar, and an agreeable table beer.

“ The business of sugar-making is mostly managed by women and boys; the men generally having nothing more to do with it than to tap the trees, prepare the sheds, and different apparatus. So that our agricultural employments are very little obstructed by this business, which produces so important an article for domestic uses. The perfection to which we have brought our sugars has induced many people in the upper parts of the States of New-York and Pennsylvania to make a business of it during the season of the juice running; and considerable quantities have been sent to the markets of Philadelphia and York, not inferior to the best clayed French and Spanish sugars.

“ The salt springs that have been found in the single State of Kentucky, under proper management, would be sufficient to produce salt for all the inhabitants which the western country could support. There are at least twelve of those springs between Great Sandy and Cumberland; the principal of which are the upper and lower Blue licks, on Licking creek; one on the Great-bone creek; one on Drinnon's lick creek, about a mile and a half from the mouth of the Kentucky; and Bullit's lick, on Salt river, twenty miles from the rapids of the Ohio. This spring is the first that was worked in the country. The first essays in this business were also imperfect, which, however, proceeded more from poverty than ignorance. The great principle by which the saline particles are crystallized, is universally known to be by the evaporation of the humid; and the greater the superficial surface of that evaporation, the more rapidly the crystals will form. But the first settlers could not procure salt pans, and were obliged to use as a substitute the pots and kettles they had brought out for domestic purposes.

Such was the commencement of making salt in this country; which, from its scarcity and high price, in some measure discouraged the settlement of the country. However, the great improvements since that era have done away all those fears, and salt is now manufactured in plenty, and sold cheap.

"The water is by no means so strong as sea water. It requires nearly four hundred gallons to make one bushel of salt, which is more by one half than would be wanted of sea water to produce that quantity.

"The water is not collected immediately from the spring. An area of from five to ten acres round those springs is found to be impregnated with this mineral, so that by digging wells in any part of that space salt water is discovered. From this circumstance I am of opinion, that by digging pits a body of earth would be found strongly impregnated with salt, from which the saline particles might be more easily separated than from water; and it is certain, that if the water receives its particles of salt from the earth that it passes through, such earth must contain a large proportion of salt, otherwise the strength of the water would not be so considerable. However it will require some time to determine this matter, as the infancy of our country will not permit us to speculate too largely in experiments that would be attended with heavy expenses, were they not to prove successful.

"Salt springs have been found in every part of the western country, which has been well explored, and I have no doubt that time will prove every part of it is well supplied with them. The manner by which they are mostly found in uninhabited places, is by the large buffalo roads which lead to them. Whenever the ramification of those roads begin to concenter, it is almost an infallible sign that a salt lick is near. Those animals resorting to them throughout the temperate part of the year for the benefit of the salt, make large roads, which leading from the lick, branch different ways into the country.

"We have various other minerals, such as iron, which is the most useful, copper, lead, sulphur, nitre, &c. &c. Iron ore is found in great plenty upon the northern branches of Licking creek, and likewise upon the waters of Green river. A lead mine has been worked many years with considerable profit, which lies in the country of Montgomery, upon the waters of the Great Kanhawa. There is another between the Cumberland and Tennessee rivers, said to be very valuable, and its ore more pure than any other which has been discovered in America. But the lead mine on the Mississippi must prove inexhaustible. It extends from the mouth of Rock river more than one hundred miles upwards. Besides these, there are several others, some of which lie on the Spanish side of the Mississippi, and have been used for years past. Copper mines have been discovered in several places, but the mine on the Wabash is, perhaps,

the richest vein of native copper in the bowels of the whole earth: and no doubt will render all the others of little or no value. Sulphur is found in several places in abundance; and nitre is made from earth which is collected from caves and other places to which the wet has not penetrated. The making this salt, in this country, is so common, that many of the settlers manufacture their own gunpowder. This earth is discovered in greater plenty on the waters of Green river, than it is in any other part of Kentucky; but perhaps still farther southward it will be found in greater plenty. However, it is so common in every part of the country, that it might be made a considerable article for exportation. I have heard of black lead mines upon the head waters of the Kentucky, but I have not been able to procure any certain information respecting them. But I should conceive that there can be little doubt, that when the country, and particularly the mountainous parts of it, are well explored, all the useful minerals will be found in abundance.

“ I have already mentioned the coal mines in the upper parts of the Ohio country; besides which there are great quantities of coal upon the upper branches of the Mississippi. It is particularly favourable that this mineral lies at the heads of our larger rivers, as it can be sent down with the greatest facility; and it is very certain that the great body of it, which the Ohio country alone contains, is equal to answer all the purposes for which it may be wanted throughout this extensive empire.

“ Though the champaign part of this country has no stone on its surface, yet every where lime-stone is found from six to fifteen feet below it. Most of the bottoms of our rivulets and streams are paved with this stone. It is very easily calcined, when it becomes excellent lime. It is also convenient for building, by reason of its peculiar smoothness, and the ease with which it may be worked into any form. Besides this stone, which is the most common, every other kind of stone is found that is either useful or ornamental; such as flint, grindstone, and millstones, of a very good quality, which have been reckoned equal to French burrs. There is the greatest plenty of marble upon the banks of the Kentucky, particularly at Leesburgh. I have not seen any that has been polished; but judges in that business give us the most flattering ideas of its quality.

“ Clay is very common in every part of this country which is proper for bricks; and there is a superior kind on the Beech fork of Salt river, which no doubt might be manufactured into

good porcelain. Carver has mentioned a clay of this sort that he saw above St. Anthony's falls. Marl, chalk, gypsum, and oöres, are found in various parts.

“With respect to climate in Kentucky you experience a greater temperature of air than in any country in which I ever travelled, Fahrenheit's thermometer seldom falling below 35 degrees in winter, nor rising above 80 in summer. The approach of the seasons is gradual. The summer continues mostly to the middle of October. The autumn, or mild weather, generally continues until Christmas, when we have some cold and frost until February, when spring approaches, and by the beginning of March several shrubs and trees begin to shoot forth their buds, by the middle of the month, the buck-eye or horse-chestnut is clad in its summer's livery; and by the middle of April the foliage of the forests is completely expanded, which is a fortnight earlier than the leaves are shot in Virginia and Maryland. Cumberland is proportionally more temperate than North-Carolina, as Kentucky is than Virginia.”

STATE OF NORTH-CAROLINA.

SITUATION, EXTENT, AND BOUNDARIES.

THIS State is situated between $35^{\circ} 50'$, and $36^{\circ} 30'$ north latitude, and 1° and $6^{\circ} 30'$ west-longitude from Philadelphia. Its length is about three hundred miles, and its breadth one hundred and twenty; it therefore contains about thirty-four thousand square miles. It is bounded on the north, by Virginia; on the east, by the Atlantic ocean; on the south, by South-Carolina and Georgia; and on the west, by a chain of mountains a few miles to the westward of the Great Appalachian mountains. This chain of mountains, taking the whole for a part, has occasionally been called the Great Iron mountain. All that vast country which lies on the west of the Iron mountain, was surrendered to the United States by the State of North-Carolina in the year 1789. It has since been erected into a separate government, commonly called the Territory South of Ohio, or the Tennessee government.

The charter limits of North-Carolina were a line, beginning on the sea side, at a cedar stake, at or near the mouth of a little river on the southern extremity of Brunswick county, and running thence a north-west course through the boundary-house, in latitude $33^{\circ} 56'$ to latitude 35° , and on that parallel west as far as is mentioned in the charter of King Charles II. to the original proprietors of Carolina, viz, *to the South Sea*. Their northern line begins on the sea coast in latitude $36^{\circ} 30'$, and runs due west to the termination of the southern line. This line strikes the Mississippi fifteen miles below the mouth of the Ohio. These limits were ascertained and confirmed agreeably to an order of George II. in council. Great-Britain, by the treaty of 1763, which was made with France and Spain, surrendered her claim to all the territory westward of the Mississippi;

and those nations, by the same treaty, granted to Great-Britain the free navigation of the Mississippi. By the treaty of 1783, between Spain and Great-Britain, his Catholic Majesty expressly confirms the former treaty of 1763, except such parts as are there excepted; consequently he confirms to Great-Britain the navigation of the Mississippi; and Great-Britain, on her part, yields to the United States her entire right to the navigation of the same river. But since Spain now claims the exclusive navigation of the Mississippi, which she had formerly surrendered, it is very probable that the United States to whom North-Carolina has ceded her western territory, may claim the lands on the west side of the Mississippi, which were within the original charter bounds of that State.

CLIMATE.

The western hilly parts of this State are as healthy as any of the United States. The country is fertile, full of springs and rivulets of pure water. The air is serene a great part of the year and the inhabitants live to old age, which cannot so generally be said of the inhabitants of the flat country. Though the days in summer are extremely hot, the nights are cool and refreshing. Autumn is very pleasant, both in regard to the temperature and serenity of the weather, and the richness and variety of the vegetable productions which the season affords. The winters are so mild in some years, that autumn may be said to continue till spring. Wheat harvest is in the beginning of June, and that of Indian corn early in September.

In the flat country, near the sea coast, the inhabitants, during the summer and autumn, are subject to intermitting fevers, which often prove fatal, as bilious or nervous symptoms prevail. These fevers are seldom immediately dangerous to the natives who are temperate, or to strangers who are prudent. They, however, if suffered to continue for any length of time, bring on other disorders, which greatly impair the natural vigour of the mind, debilitate the constitution, and terminate in death. The countenances of the inhabitants during these seasons have generally a pale yellowish cast, occasioned by the prevalence of bilious symptoms. They have very little of the bloom and freshness of the people in the northern States.

It has been observed that more of the inhabitants, of the men especially, die during the winter by pleurifies and peripneumonies, than during the warm months by bilious complaints. These pleurifies are brought on by intemperance, and by an imprudent

exposure to the weather. Were the inhabitants cautious and prudent in these respects, it is alledged by their physicians, that they might in general escape the danger of these fatal diseases. The use of flannel next to the skin during the winter is reckoned an excellent preventative of the diseases incident to this climate.

FACE OF THE COUNTRY, SEA COAST, &c.

North-Carolina, in its whole width, for sixty miles from the sea, is a dead level. A great proportion of this tract lies in forest, and is barren. In all the champaign country, marine productions are found by digging eighteen or twenty feet below the surface of the ground. The sea coast, the sounds, inlets, and the lower parts of the rivers have uniformly a muddy, soft bottom. Sixty or eighty miles from the sea, the country rises into hills and mountains.

The several rivers in this State are the Chowan, formed by the confluence of the Meherrin, Nottaway, and black rivers; all of which rise in Virginia. It falls into the north-west corner of Albemarle sound, and is three miles wide at its mouth, but narrows fast as you ascend it.

The Roanoke, a long rapid river, formed by Staunton river, which rises in Virginia, and Dan river, which rises in South-Carolina. The low lands on this river, are subject to inundations. It is navigable only for shallops, nor for these, but about sixty or seventy miles, on account of falls, which in a great measure obstruct the water communication with the back country. It empties, by several mouths, into the south west end of Albemarle sound. The planters on the banks of this river are supposed to be the wealthiest in North-Carolina. One of them it is said, raises about three thousand barrels of corn, and four thousand bushels of peas, annually.

The Cusshai is a small river, which empties into Albemarle sound, between the Chowan and the Roanoke.

Pamlico, or Tar, a river which opens into Pamlico sound; its course is from north-west to south-east. It is navigable for vessels drawing nine feet water to the town of Washington, about forty miles from its mouth; and for scows or flats, carrying thirty or forty hogheads, fifty miles farther, to the town of Tarborough. Beyond this place the river is inconsiderable, and is not navigable.

The Neus, a river which empties into Pamlico sound below Newbern; it is navigable for sea vessels about twelve miles above

the town of Newbern; for scows fifty miles; and for small boats two hundred miles.

The Trent river, from the south-west, which falls into the Neus at Newbern, is navigable for sea vessels about twelve miles above the town, and for boats thirty.

There are several other rivers of less note, among which are the Pasquotank, Perquimins, Little river, Alligator, &c. which discharge themselves into Albemarle sound. All the rivers in North-Carolina, and, it may be added, in South-Carolina, Georgia, and the Floridas, which empty into the Atlantic ocean, are navigable by any vessel that can pass the bar at their mouth. While the water courses continue wide enough for vessels to turn round, there is generally a sufficient depth of water for them to proceed.

Cape Fear, more properly Clarendon river, opens into the sea at Cape Fear, in about latitude $33^{\circ} 45'$. As you ascend it, you pass Brunswick on the left, and Wilmington on the right. The river then divides into north-east and north-west branches, as they are called. It is navigable for large vessels to Wilmington, and for boats to Fayetteville, near ninety miles farther. This river affords the best navigation in North-Carolina. Yadkin river rises in this State, and running south-eastwardly, crosses into South-Carolina, where it takes the name of Pedee, and passes to the sea below George-town.

The rivers of this State would be much more valuable, were it not that they are barred at their mouths. This circumstance, and the coast furnishing no good harbours, will prevent the State from building large ships, for which they have an abundance of excellent timber. Several causes have been assigned for all the harbours and rivers being barred, south of the Chesapeak. Some suppose the bars are formed by the current of the long rivers throwing up the sands, where their rapidity terminates; others with more probability say, that a bank is thrown up by the gulf stream, which runs near these shores.

The banks of the rivers in this, and the other neighbouring States, often overflow after great rains, which does much damage to the plantations. A gentleman on the spot asserts, that he has seen the water thirty feet below the banks of the river, just after it had been ten feet above them. This is owing to the narrowness of the mouths of the rivers, which do not afford a sufficient channel for the waters, accumulating every mile, to discharge themselves into the ocean,

Pamlico sound is a kind of lake or inland sea, from ten to twenty miles broad, and nearly one hundred miles in length. It is separated from the sea, in its whole length, by a beach of sand hardly a mile wide, generally covered with small trees or bushes. Through this bank are several small inlets by which boats may pass. But Ocrecok inlet is the only one that will admit vessels of burthen into the districts of Edenton and Newbern. This inlet is in latitude $35^{\circ} 10'$, and opens into Pamlico sound between Ocrecok island and Corebank; the land on the north is called Ocrecok; on the south Portsmouth. A bar of hard sand crosses this inlet, on which, at low tide, there is fourteen feet water. Six miles within this bar is a hard sand shoal, called the Swash, lying across the channel. On each side of the channel are dangerous shoals, sometimes dry. There is from eight to nine feet water at full tide, according to the winds on the Swash. Common tides rise eighteen inches on the bar, and ten on the Swash. Between the bar and the Swash is good anchoring ground, called the Upper and Lower anchorages. Ships drawing ten feet water do not come farther than the first anchorage, till lightened. Few mariners, though acquainted with the inlets, choose to bring in their own vessels, as the bar often shifts during their absence on a voyage. North of Pamlico sound, and communicating with it, is Albemarle sound sixty miles in length, and from eight to twelve in breadth.

Core sound lies south of Pamlico, and communicates with it. These sounds are so large when compared with their inlets from the sea, that no tide can be perceived in any of the rivers which empty into them, nor is the water salt even in the mouths of these rivers.

Cape Hatteras is in latitude $35^{\circ} 15'$. At the time of Sir Walter Raleigh's approaching the American shores, the shoals in the vicinity of Hatteras were found to be extremely dangerous, and no vessels in that latitude ventured within seven leagues of the land. From a survey of the ancient drafts of this part of the coast there can be no doubt but the fears of former navigators were not without foundation, as these shoals are laid down very large in extent, and in many places covered with not more than five or six feet water, at a great distance from the land.

The constant experience of the coasting trade of the United States demonstrates, either that the ancient drafts were purposely

falsified in order to deter seamen from venturing too near a coast, with which they had as yet a very slender acquaintance, or *which is the most probable*, that by the strong currents hereabouts, which are only counter currents of the gulph stream, the lands, which were originally heaped up in this part of the ocean by some ancient convulsion of nature, have been gradually wearing away, and diminishing to what we find them to be at this time.

At present the out shoals, which lie about fourteen miles south-west of the cape, are but of five or six acres extent, and where they are really dangerous to vessels of moderate draught, not more than half that number of acres. On the shoalest part of these there is, at low water, about ten feet, and here at times the ocean breaks in a tremendous manner, spouting, as it were, to the clouds, from the violent agitations of the gulph stream, which touches the eastern edge of the banks, from whence the declivity is sudden, that is to say, from ten fathoms to no soundings. On the spot abovementioned, which is firm land, it has been the lot of many a good vessel, in a gale of wind, to strike, and go to pieces. In moderate weather, however, these shoals may be passed over, if necessary, at full tide, without much danger, by vessels not drawing more than eight, nine, or ten feet water.

From this bank, which was formerly of vast extent, and called the Full Moon Shoal, a ridge runs the whole distance to the Cape, about a north-west course: this ridge, which is about half a mile wide, has on it at low tide, generally ten, eleven, and twelve feet water, with gaps at equal intervals affording good channels of about fifteen or sixteen feet water. The most noted of these channels, and most used by coasting vessels, is about one mile and a half from the land, and may easily be known by a range of breakers which are always seen on the west side, and a breaker head or two on the eastern side, which, however, are not so constant, only appearing when the sea is considerably agitated. This channel is at least two and a half miles wide, and might at full sea be safely passed by the largest ships: these however rarely attempt it. The common tides swell about six feet, and always come from the south-east. A little north of the cape is good anchoring in four or five fathoms, and with the wind to the westward, a boat may land in safety, and even bring off casks of *fresh water*, plenty of which is *to be found every where on the beach*, by digging a foot or two, and putting a barrel into the sand.

Cape Lookout is south of Cape Hatteras, opposite Core sound, and has already been mentioned as having had an excellent harbour, entirely filled up with sand since the year 1777.

Cape Fear is remarkable for a dangerous shoal, called from its form the Frying-pan. This shoal lies at the entrance of Cape Fear river, the south part of it, six miles from Cape Fear pitch, in latitude $33^{\circ} 32'$.

There are in this State two swamps, that have obtained the names of Great and Little Dismal.

Great Dismal is on the dividing line between Virginia and North-Carolina. It is chiefly owned by two companies. The Virginia company, of whom the President of the United States is one, owns one hundred thousand acres. The North-Carolina company owns forty thousand acres. In the midst of this Dismal there is a lake about seven miles long, called Drummond's pond. The waters of which in rainy seasons discharge themselves to the southward into the Pasquotank, and to the north and eastward into the branches of the Nansemond, Elizabeth river, and a river which runs into Currituck sound; a navigable canal is to be dug from the head of the Pasquotank to the head of Elizabeth river in Virginia; the distance is about fourteen miles. This canal will pass about a mile to the eastward of Drummond's pond, and will receive water from that lake; to pass through the lake would not be safe for low-sided vessels. The company by whom this canal is to be cut, have been incorporated by the concurring laws of Virginia and North-Carolina. In September, 1791, the subscription was nearly full, and the company chose their directors, and other officers. By this canal the exports of Norfolk must be greatly increased.

Little Dismal is in Currituck county on the south side of Albemarle sound. This Dismal had not drawn the public attention as an object of importance before the end of the late war, at which time it was chiefly taken up. It is now supposed to contain one of the most valuable rice estates in America. In the midst of this Dismal there is a lake of about eleven miles long, and seven miles broad. In the year 1785, and 1786, Josiah Collins, Esq. of Edenton, in company with Messrs. Allen and Dickinson of that place, took up near one hundred thousand acres of land round the lake, for the purpose of making a navigable canal from the lake to the head of Skuppernong river; the distance of which is five and a half miles. This canal, twenty feet wide, was finished in 1790, and the company in 1791 raised above one hundred and twenty acres of rice on

the margin. The natural channel by which the lake used to discharge its waters is now stopped, and the waters pass off by the canal. About five hundred yards from the lake, the company have erected several saw mills. The water in the lake is higher than the surface of the ground for about half a mile distance on both sides of the canal; whence it follows, that the company can at any time lay under water about ten thousand acres of a rich swamp, which proves admirably fitted for rice.

SOIL, PRODUCTIONS, &c.

On the banks of some of the rivers, particularly of the Roanoke, the land is fertile and good, interspersed through the other parts are glades of rich swamp, and ridges of oak land of a black fertile soil.

Wheat, rye, barley, oats, and flax, grow well in the back hilly country. Indian corn and pulse of all kinds in all parts. Ground peas run on the surface of the earth, and are covered by hand with a light mould, and the pods grow under ground; they are eaten raw or roasted, and taste much like an hazle nut. Cotton and hemp are also considerably cultivated here, and might be raised in much greater plenty. The cotton is planted yearly: the stalk dies with the frost. The labour of one man will produce one thousand pounds in the seeds, or two hundred and fifty, fit for manufacturing. The country is generally friendly to the raising of sheep, which yield from three quarters of a pound to two pounds and a half of wool, which is short and not very fine.

The large natural growth of the plains in the low country is almost universally pitch pine, which is a tall, handsome tree, far superior to the pitch pine of the northern States. This tree may be called the staple commodity of North-Carolina. It affords pitch, tar, turpentine, and various kinds of lumber, which together constitute at least one half of the exports of this State. This pine is of two kinds, the common and the long-leaved. The latter has a leaf shaped like other pines, but is nearly half a yard in length, hanging in large clusters. No country produces finer white and red oak for staves. The swamps abound with cyprus and bay trees. The latter is an evergreen, and is food for the cattle in the winter. The leaves are shaped like those of the peach tree, but larger. The most common kinds of timber in the back country are, oak, walnut, and pine. A species of oak grows in the moist, sandy soil, called black jack. It seldom grows larger than eight or nine inches diameter. It

is worthy of remark, that the trees in the low country, near the sea coast, are loaded with vast quantities of a long species of moss, which, by absorbing the noxious vapour that is exhaled from stagnated waters, contributes much, it is supposed, to the healthiness of the climate. This hypothesis is confirmed by experience, since it is commonly observed, that the country is much less healthy for a few years after having been cleared, than while in a state of nature.

The mistletoe is common in the back country. This is a shrub which differs in kind, perhaps, from all others. It never grows out of the earth, but on the tops of trees. The roots, if they may be so called, run under the bark of the tree, and incorporate with the wood. It is an evergreen, resembling the garden box wood.

The principal wild fruit are plums, grapes, strawberries, and blackberries.

The country is generally covered with herbage of various kinds, and a species of wild grass. It abounds with medicinal plants and roots; among others are the ginseng; Virginia snake root; Seneca snake root, an herb of the emetic kind, like ipecacuana; lion's heart, which is a sovereign remedy for the bite of a serpent. A species of the sensitive plant is also found here; it is a sort of brier, the stalk of which dies with the frost, but the root lives through the winter, and shoots again in the spring. The lightest touch of a leaf causes it to turn and cling close to the stalk. Although it so easily takes the alarm, and apparently shrinks from danger, in the space of two minutes after it is touched, it perfectly recovers its former situation. The *mucipula veneris* is also found here. The rich bottoms are overgrown with canes; the leaves are green all the winter, and afford an excellent food for cattle; they are of a sweetish taste, like the stalks of green corn, which they in many respects resemble.

There is a long ridge of lime-stone, which, extending in a south-westerly direction, crosses the whole State of North-Carolina. It crosses Dan river to the westward of the Sawto towns, crosses the Yadkin about fifty miles north-west from Salisbury, and thence proceeds by the way of King's mountain to the southern States. No lime-stone has been found to the eastward of that ridge. A species of rock has been found in several places, of which lime is made, which is obviously a concretion of marine shells. The State is traversed nearly in the same direction by an other stratum of rocks which passes near Warrenton. It is a circumstance worthy of observation, that the springs of water

on the north-west side of the ridge are apt to fail in dry seasons; on the south-west side they seldom fail.

The river Yadkin, where it passes Salisbury, is about four hundred yards broad, but it is reduced, between two hills, about twenty five miles to the southward of that town, to the width of eighty or one hundred feet. For two miles it is narrow and rapid, but the most narrow and rapid part is not above half a mile in length. In this narrow part, shad are caught in the spring of the year by hoop-nets, in the eddies, as fast as the strongest men are able to throw them out. Perhaps there is not in the United States a more eligible situation for a large manufacturing town. Boats with forty or fifty hogshheads may pass easily from these rapids to George-town.

CIVIL DIVISIONS.

This State is divided into eight districts which are subdivided into fifty-four counties, as follows ;

DISTRICT OF EDENTON.

Chowan,	Pasquotank,	Hertford,
Currituck,	Perquimons,	Bertie.
Camden,	Gates,	Tyrrel.

DISTRICT OF WILMINGTON.

New Hanover,	Duplin,	Onslow.
Brunswick,	Bladen,	

DISTRICT OF NEWBERN.

Craven,	Johnston,	Wayne,
Beaufort,	Pitt,	Hyde,
Carteret,	Dobbs,	Jones.

These three districts are on the sea-coast, extending from the Virginia line southward, to South-Carolina.

DISTRICT OF HALIFAX.

Halifax,	Edgecombe,	Franklin,
Northampton,	Warren,	Nash.
Martin,		

DISTRICT OF HILLSBOROUGH.

Orange,	Granville,	Wake,
Chatham,	Caswell,	Randolph.
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GENERAL DESCRIPTION

DISTRICT OF SALISBURY.

Rowan,	Iredell,	Stokes,
Mecklenburgh,	Surry,	Guilford.
Rockingham,	Montgomery.	

DISTRICT OF MORGAN.

Burke,	Lincoln,	Wilkes.
Rutherford.		

DISTRICT OF FAYETTE.

Cumberland,	Richmond,	Sampson,
Moore,	Robison,	Anson.

These five districts, beginning on the Virginia line, cover the whole State west of the three maritime districts before mentioned; and the greater part of them extend quite across the State from north to south.

CHIEF TOWNS.

Newbern, Edenton, Wilmington, Halifax, Hillsborough, Salisbury, and Fayetteville, each in their turns have been the seat of the General Assembly. At present they have no capital. According to the constitution of this State, the General assemblies are to meet at any place they think fit on their own adjournments. The effect of this power was such as might be expected, in a state where there is no very large city or town nearly central; it was the source of constant intrigue and disquietude. The Assembly seldom sat twice in succession in the same place. The public officers were scattered over every part of the country. You could seldom visit the governor, the secretary, the treasurer, or the comptroller, in less riding than two or three hundred miles. Hence records were lost, accounts were badly kept, and the State from that single misfortune, is supposed to have lost more than a million of dollars. It was equally clear to all parties that the government should not be itinerant, and the convention which met in the year 1788, to consider of the new federal constitution according to their instructions, took this part of their own constitution into their consideration, and by a very small majority resolved that the seat of government should be fixed at some place to be agreed on by commissioners, within ten miles of Wake courthouse. This is a healthy and central situation. But an act of the legislature became necessary to give effect to this ordinance, and in subsequent assemblies, there has been generally a similar majority.

that is to say, a majority of one or two to oppose the ordinance. The profits that might arise to a few publicans and shopkeepers at some other town in which the Assembly might meet, occasioned more activity and procured more votes than the patriotic desire of terminating disputes and securing a quiet, orderly, and good government. For the honour of reason, by which men should be governed rather than by passion, it is to be wished that their legislatures, in similar circumstances, had not acted in a similar manner.

The General Assembly of the State, at their session in December, 1791, however, passed a law for carrying the ordinance into effect, and appropriated ten thousand pounds towards erecting public buildings.

NEWBERN,

Newbern is the largest town in the State. It stands on a flat, sandy point of land, formed by the confluence of the rivers Neus on the north, and Trent on the south. Opposite the town, the Neus is about a mile and a half, and the Trent three quarters of a mile wide. The town contains about four hundred houses,* all built of wood, excepting the *ci devant* palace, the church, the jail and two dwelling houses, which are of brick. The palace is a building erected by the province before the revolution, and was formerly the residence of the governors. It is large and elegant, two stories high, with two wings for offices, a little advanced in front towards the town; these wings are connected with the principal building by a circular arcade. This once handsome and well-furnished building, is now much out of repair. One of the halls is now used for a dancing, and the other for a school-room; which are the only present uses of this palace. The arms of the king of Great Britain still appear in a pediment in front of the building. The Episcopal church is a small brick building, with a bell. It is the only house for public worship in the place. A rum distillery has lately been erected in this town. It is the county town of Craven county, and has a court-house and gaol. The court-house is raised on brick arches so as to render the lower part a convenient market-place; but the principal marketing is done with the people in their canoes and boats at the river side,

EDENTON.

Edenton is situated on the north side of Albemarle sound; and has about one hundred and fifty indifferent wood houses, and a

* In September, 1791, near one third part of this town was consumed by fire.

few handsome buildings. It has a brick church for Episcopalians, which for many years has been much neglected, and serves only to shew that the people once had a regard, at least, for the externals of religion. Its local situation is advantageous for trade but not for health. It is the county town of Chowan county, and has a court-house and gaol. In or near the town lived the proprietary, and the first of the royal governors.

WILMINGTON.

Wilmington is a town of about one hundred and eighty houses, situated on the east side of the eastern branch of Cape Fear or Clarendon river, thirty-four miles from the sea. The course of the river, as it passes by the town is from north to south, and is about one hundred and fifty yards wide,

In 1786 a fire broke out, supposed to have been kindled by the negroes, and consumed about twenty-five or thirty houses. The town is rebuilding slowly.

HILLSBOROUGH.

Hillsborough is an inland town, situated in a high, healthy, and fertile country, one hundred and eighty miles north-west from Newbern. It is settled by about sixty or seventy families.

SALISBURY.

Salisbury is agreeably situated, about five miles from Yadkin river, and contains about ninety dwelling houses.

HALIFAX.

Halifax is a neat little town; it stands on the western bank of the Roanoke, about six miles below the falls, and has about thirty or forty dwelling houses.

FAYETTEVILLE.

Fayetteville stands on the west side of Clarendon, commonly called Cape Fear river, and about a mile from its banks. It is well-built on both sides of a creek, from which the town was formerly called Cross Creek. Two small creeks unite near the town, and an island, just below the junction, divides the creek. Some person took it into his head that the creeks crossed each other without mixing their waters: and the strangeness or improbability of the thing, as in many other cases, seems to have been the reason, why it was believed. Since the peace this

own has flourished, but a considerable part of it was burnt in 1792. It is situated on a settlement of Scotch Highlanders.

WASHINGTON.

Washington is situated in the county of Beaufort, on the north side of Tar river, in latitude $35^{\circ} 30'$, distant from Ocrecok inlet ninety miles. From this town is exported tobacco of the Petersburg, quality pork, beef, Indian corn, peas, beans, pitch, tar, turpentine, rosin, &c. and pine boards, shingles and oak staves. About one hundred and thirty vessels enter annually at the custom-house in this town.

GREENEVILLE.

Greeneville, so called after Major-general Nathaniel Greene, is situated in Pitt county, on the south bank of Tar river, in latitude $35^{\circ} 35'$, distant from Ocrecok inlet one hundred and ten miles. At this town there is an academy established, called the Pitt Academy.

TARBOROUGH.

Tarborough is situated in the county of Edgecomb, on the south bank of Tar river, in latitude $35^{\circ} 45'$, distant from Ocrecok inlet one hundred and forty miles. At this town large quantities of tobacco of the Petersburg quality, pork, beef and Indian corn, are collected for exportation.

P O P U L A T I O N .

From the marshal's return it appears, that the number of inhabitants, in the year 1791, was three hundred and ninety-three thousand seven hundred and fifty-one, of whom two hundred and ninety-three thousand one hundred and seventy-nine were citizens: perhaps there are few instances of such a rapid increase of inhabitants as we find in this State; in the year 1710, we are well assured, that the number of inhabitants in North-Carolina did not exceed six thousand: this extraordinary increase must arise, in a great measure, from the migration of inhabitants from other States, or from distant countries; but this will not fully account for the present state of population in North-Carolina. By examining the return, we find there are one hundred and forty-seven thousand four hundred and ninety-four white male inhabitants; we also find, that the number of males under sixteen years exceed the number above

sixteen, by seven thousand five hundred and eighteen, which is about one nineteenth of the whole. This is a very remarkable fact, as it respects the increase of the human species. We find a small difference in the States of Delaware, Virginia and Georgia, in favour of those under sixteen. The difference in Kentucky is similar to that of North-Carolina. In the other States, the number above sixteen is greatest, and in the several kingdoms in Europe, as far as our information reaches, the inhabitants above sixteen are universally much more numerous than those under that age. The great difference that appears in North-Carolina in favour of children, cannot be explained by supposing that the climate is sickly, for we know that such climates are equally fatal to young and old. The idea too of a sickly climate does not accord with the prodigious increase of inhabitants in this State, nor with another fact, viz. that there is a considerable proportion of very old inhabitants in the State. To explain this we must observe, that the human species, and all other animals, are found to increase in proportion to the comforts of life, and the ease with which they can support their progeny. Remove the rigours of an inhospitable climate, and the more uniform dissuative to matrimony, *the apprehended difficulty of supporting a family*, and the human species would double not in twenty but in fifteen years. In North-Carolina, neither the cold of winter, nor the heat of summer, are in the back country at all disagreeable: land continues to be plenty and cheap; grain is raised with so much ease, and the trouble of providing for cattle in winter so trifling, that a man supports his family with half the labour that is required in the cold climates. Under these advantages, we are not to wonder that people in all ranks of life should marry very young; we have heard of grandmothers in this State who were not more than twenty-seven years old.

The following tables shew the proportion of population in the different parts of the State, according to the return made in 1791.

EDENTON DISTRICT.

COUNTIES.	Free white males of 16 years and upwards.	Free white males under 16 years of age.	Free white females.	All other free persons.	Slaves.	Total.
Chowan, including town of Edenton, - - - - }	641	559	1182	41	2588	5011
Perquimons, - - - -	885	923	1717	37	1878	5440
Pasquotank, - - - -	951	1034	1810	79	1623	5497
Camden, - - - -	727	758	1480	30	1038	4033
Currituck, - - - -	1017	1024	1960	115	1103	5219
Gates, - - - -	790	775	1515	93	2219	5392
Hertford, - - - -	814	823	1533	216	2442	5828
Bertie, - - - -	1762	1841	3514	348	5141	12606
Tyrrel, - - - -	807	959	1777	35	1166	4744
	8394	8606	16488	994	19198	53770

NEWBERN DISTRICT.

Craven, including town of Newbern, }	1709	1538	3227	337	3658	10469
Jones, - - - -	736	794	1541	70	1681	4822
Johnston, - - - -	1039	1119	2082	64	1329	5634
Dobbs, - - - -	1162	1293	2478	45	1915	6893
Wayne, - - - -	1064	1219	2256	37	1557	6133
Pitt, - - - -	1461	1507	2915	25	2367	8275
Beaufort, - - - -	951	926	1824	129	1632	5462
Hyde, - - - -	795	718	1522	37	1048	4120
Carteret, - - - -	718	707	1502	92	713	3732
	9635	9821	19348	836	15900	55540

WILMINGTON DISTRICT.

New-Hanover, including Wilmington, - - - }	834	695	1497	67	3738	6831
Brunswick, - - - -	380	398	779	3	1511	3071
Bladen, - - - -	827	830	1682	58	1676	5084
Duplin, - - - -	1035	1187	2054	3	1383	5662
Onslow, - - - -	828	930	1788	82	1748	5387
	3914	4040	7801	215	9059	26029

FAYETTE DISTRICT.

COUNTIES.	Free white males of 16 years and upwards.	Free white males under 16 years of age.	Free white females.	All other free persons.	Slaves.	Total.
Cumberland, including Fayetteville, - - - - }	1791	1557	3059	83	2181	8671
Moore, - - - -	849	968	1570	12	371	3770
Richmond, - - - -	1096	1205	2116	55	583	5055
Robison, - - - -	1131	1141	2244	277	533	5326
Sampton, - - - -	1143	1281	2316	140	1183	6065
Anton, - - - -	1034	1183	2047	41	828	5133
	7045	7335	13352	608	5679	34020

HALIFAX DISTRICT.

Halifax, including town of Halifax, }	1835	1778	3403	443	6506	13965
Northampton, - - - -	1334	1273	2503	462	4409	9981
Warren, - - - -	1070	1319	2220	68	4720	9397
Franklin, - - - -	1089	1400	2316	37	2717	7559
Nash, - - - -	1143	1426	2627	188	2009	7393
Edgecombe, - - - -	1650	1879	3495	70	3152	10255
Martin, - - - -	1062	1000	2022	05	1889	6080
	9194	10084	18580	1304	25402	64080

HILLSBOROUGH DISTRICT.

Orange, including Hillsborough, }	2433	2709	4913	101	2060	12216
Granville, - - - -	1581	1873	3050	315	4163	10982
Twissell, - - - -	1801	2110	3377	72	2736	10096
Wake, - - - -	1772	2089	3688	180	2463	10192
Hatham, - - - -	1756	2160	3664	9	163	9221
Randolph, - - - -	1583	1952	3266	24	452	7276
	10925	12893	21058	701	13503	50083

SALISBURY DISTRICT.

COUNTIES.	Free white males of 16 years and upwards.	Free white males under 16 years.	Free white females.	All other free persons.	Slaves.	Total.
Rowan, including Salisbury, - }	3288	3837	6864	97	1742	15828
Mecklenburgh, -	2378	2573	4771	70	1603	11395
Iredell, - - -	1118	1217	2239	3	858	5435
Montgomery, -	967	1121	1798	5	834	4725
Guilford, - - -	1607	1799	3242	27	516	7191
Rockingham - -	1173	1413	2491	10	1100	6187
Surry, - - - -	1531	1762	3183	17	698	7191
Stokes, - - - -	1846	2104	3778	13	787	8528
	13908	15826	28366	242	8138	66480

MORGAN DISTRICT.

Burke, - - - -	1716	2111	3685	11	595	8118
Wilkes, - - - -	1614	2252	3726	2	549	8143
Rutherford, - - -	1584	2145	3463	2	614	7808
Lincoln, - - - -	2058	2294	3937		935	9224
	6972	8802	14811	15	2693	33293

SUMMARY OF POPULATION.

Edenton District, -	8394	8696	16488	994	19198	53770
Newbern do. - -	9635	9821	19348	836	15900	55540
Wilmington do. -	3914	4049	7801	215	10053	26035
Fayette do. - -	7046	7335	13352	608	5679	34020
Halifax do. - -	9194	10084	18586	1364	25402	64630
Hillsborough do. -	10935	12893	21958	701	13506	59983
Salisbury do. - -	13908	15826	28366	242	8138	66480
Morgan do. - - -	6972	8802	14811	15	2693	33293
	69988	77506	140710	4075	100571	392751

To the return the following note was prefixed :

“ The Marshal begs leave to observe, that the assistants having not returned the numbers of the different towns separate from the counties in which they were situated, renders it out

of his power to make a distinct return of them, but is satisfied that not one town in North-Carolina contains more than two thousand inhabitants.

What is the present number of inhabitants cannot be determined with precision; but, on the most moderate calculation, they must be more than four hundred and seventy thousand.

RELIGION AND CHARACTER.

The western parts of this State, which have been settled within the last forty years, are chiefly inhabited by Presbyterians from Pennsylvania, the descendants of people from the north of Ireland, and are exceedingly attached to the doctrines, discipline and usages of the church of Scotland. They are a regular, industrious people. Almost all the inhabitants between the Catawba and Yadkin rivers are of this denomination, and they are in general well supplied with a sensible and learned ministry. There are interspersed some settlements of Germans, both Lutherans and Calvinists, but they have very few ministers.

The Moravians have several flourishing settlements in this State. In 1751 they purchased of Lord Granville one hundred thousand acres of land, between the Dan and Yadkin rivers, about ten miles south of Pilot mountain, in Surry county, and called it Wachovia, after an estate of Count Zinzendorf, in Austria. In 1755, this tract, by an act of Assembly, was made a separate parish by the name of Dobb's parish. The first settlement called Bethabara, was begun in 1753 by a number of the brethren from Pennsylvania, in a very wild uninhabited country, which, from that time, began to be rapidly settled by farmers from the Middle States.

In 1759, Bethany, a regular village, was laid out and settled. In 1766, Salem, which is now their principal settlement, and nearly in the center of Wachovia, was settled by a collection of tradesmen. The same constitution and regulations are established here as in other regular settlements of the united brethren. Besides, there are in Wachovia three churches, one in Friedland, one in Friedburgh, and another at Hope, each of which has a minister of the brethren's church. These people, by their industry and attention to various branches of manufacture, are very useful to the country around them.

The friends of Quakers, have a settlement at New-Garden, in Guilford county, and several congregations at Perquimins

and Pasquotank. The Methodists and Baptists are numerous and increasing. Besides the denominations already mentioned, there is a very numerous body of people in this, and in all the Southern States, who cannot properly be classed with any sect of Christians, having never made any profession of Christianity.

The inhabitants of Wilmington, Newbern, Edenton, and Halifax districts, making about three-fifths of the State, once professed themselves of the Episcopal church; the clergy in these districts were chiefly missionaries, and in forming their political attachments, at the commencement of the late war, personal safety, or real interest, or perhaps a conviction of the impolicy of opposing Great-Britain, from whence they received their salaries, induced them almost universally to declare themselves in favour of the British government, and to emigrate. There may be one or two of the original clergy remaining, but at present they have no particular pastoral charge; indeed the inhabitants in the districts above mentioned seem now to be making the experiment, whether Christianity can exist long in a country where there is no visible Christian church: the Baptists and Methodists have sent a number of missionary preachers into these districts, and some of them have large congregations: it is probable, that one or the other of these denominations, and perhaps both, may acquire consistency, and establish permanent churches.

The North-Carolinians are mostly planters, and live from half a mile to three and four miles from each other on their plantations; they have a plentiful country, no ready market for their produce, little intercourse with strangers, and a natural fondness for society, which induce them to be hospitable to strangers.

The general topics of conversation among the men, when cards, the bottle, and occurrences of the day do not intervene are negroes, the prices of indigo, rice, tobacco, &c. They appear to have little taste for the sciences. Political inquiries and philosophical disquisitions are attended to but by a few men of genius and industry, and are too laborious at present for the minds of the people at large in this State. Less attention and respect are paid to the women here, than in those parts of the United States where the inhabitants have made greater progress in the arts of civilised life; indeed it is a truth confirmed by observation, that in proportion to the advancement of civilization, in the same proportion will respect for the women be increased; so that the progress of civilization in countries, in

states, in towns, and in families, may be marked by the degree of attention which is paid by husbands to their wives, and by the young men to the young women.

Temperance and industry are not to be reckoned among the virtues of the North-Carolinians; the time which they waste in drinking, idling and gambling, leaves them very little opportunity to improve their plantations or their minds; the improvement of the former is left to their overseers and negroes; the improvement of the latter is too often neglected. Were the time which is thus wasted spent in cultivating the soil, and in treasuring up knowledge, they might be both wealthy and learned: for they have a productive country, and are by no means destitute of genius.

Time that is not employed in study or useful labour, in every country, is generally spent in hurtful or innocent exercises, according to the custom of the place, or the taste of the parties. The citizens of North-Carolina, who are not better employed, spend their time in drinking, or gaming at cards and dice, cock-fighting or horse-racing.

A strange and very barbarous practice prevailed among the lower clais of the people before the revolution, in the back parts of Virginia, North and South Carolinas, and Georgia; it was called *gouging*, and was neither more nor less than a man when boxing, putting out the eye of his antagonist with his thumb. HOW QUICK UNDER A MILD AND UPRIGHT GOVERNMENT, IS THE REFORMATION OF MANNERS! In a particular county in this State, where, at the quarterly court twenty years ago, a day seldom passed without ten or fifteen boxing matches, it is now a rare thing to hear of a fight.

North-Carolina, as already observed, has had a rapid growth; in the year 1710 it contained but about twelve hundred fencible men; it is now, in point of numbers, the fourth State in the Union. During this amazing progress in population, which has been greatly aided by emigrations from Pennsylvania, Virginia, and other States, while each has been endeavouring to increase his fortune, the human mind, like an unweeded garden, has been suffered to shoot up in wild disorder. But when we consider, that, during the late revolution, this State produced many distinguished patriots and politicians, that she sent her thousands to the defence of Georgia and South-Carolina, and gave occasional succours to Virginia; when we consider, too, the difficulties she had to encounter from a mixture of inhabitants, collected from different parts, strangers to each other,

and intent upon gain, we shall find many things in their general character worthy of praise.

TRADE AND MANUFACTURES.

A great proportion of the produce of the back country, consisting of tobacco, wheat, Indian corn, &c. is carried to market in South-Carolina and Virginia. The southern interior countries carry their produce to Charleston; and the northern to Peterburgh in Virginia. The exports from the lower parts of the State are tar, pitch, turpentine, rosin, Indian corn, boards, scantling, staves, shingles, furs, tobacco, pork, lard, tallow, bees-wax, myrtle-wax, and a few other articles, amounting in the year, ending September 30th, 1791, to five hundred and twenty-four thousand five hundred and forty-eight dollars. Their trade is chiefly with the West-Indies and the northern States. From the latter they receive flour, cheese, cyder, apples, potatoes, iron wares, cabinet wares, hats, and dry goods of all kinds imported from Great-Britain, France, and Holland, teas, &c. From the West-Indies, rum, sugar, and coffee.

It is no uncommon thing for the farmer to mark from five hundred to one thousand calves in a year. No farther attention is paid to them till they are fit for slaughter; then they are taken up, killed, barrelled and sent to the West-India market. Their pork is raised with as little trouble; large quantities of which before the war, were sent to New-England, particularly to Boston and Salem.

The late war, by which North-Carolina was greatly convulsed, put a stop to several iron works. At present there are four or five furnaces in the State that are in blast, and a proportionable number of forges. There is one in Guilford county, one in Surry, and one in Wilkes, all on the Yadkin, and one in Lincoln. The quality of the iron is excellent.

One paper mill has lately been erected at Salem by the Moravians to great advantage.

COLLEGES AND ACADEMIES.

The General Assembly of North-Carolina, in December, 1789, passed a law incorporating forty gentlemen, five from each district, as trustees of the university of North-Carolina; to this university they gave, by a subsequent law, all the debts due to the State from sheriffs or other holders of public money, and which had been due before the year 1783; they also gave it all

escheated property within the State. Whenever the trustees shall have collected a sufficient sum of the old debts, or from the sale of escheated property, the value of which is considerable, to pay the expense of erecting buildings; they are to fix on a proper place, and proceed in the finishing of them: a considerable quantity of land has already been given to the university, and the General Assembly, in December, 1791, loaned five thousand pounds to the trustees, to enable them to proceed immediately with the buildings.

There is a very good academy at Warrenton, another at Williamsborough in Granville, and three or four others in the State, of considerable note.

CONSTITUTION.

DECLARATION OF RIGHTS.

I. That all political power is vested in and derived from the people only.

II. That the people of this State ought to have the sole and exclusive right of regulating the internal government and police thereof.

III. That no man, or set of men are entitled to exclusive or separate emoluments or privileges from the community, but in consideration of public services.

IV. That the legislative, executive, and supreme judicial powers of government ought to be for ever separate and distinct from each other.

V. That all powers of suspending laws, or the execution of laws, by any authority, without the consent of the representatives of the people, is injurious to their rights, and ought not to be exercised.

VI. That elections of members to serve as representatives in General Assembly ought to be free.

VII. That in all criminal prosecutions every man has a right to be informed of the accusation against him, and to confront the accusers and witnesses with other testimony, and shall not be compelled to give evidence against himself.

VIII. That no freeman shall be put to answer any criminal charge but by indictment, presentment, or impeachment.

IX. That no freeman shall be convicted of any crime, but by the unanimous verdict of a jury of good and lawful men, in open court as heretofore used.

X. That excessive bail shall not be required, nor excessive fines imposed, nor cruel or unusual punishments inflicted.

XI. That general warrants, whereby an officer or messenger may be commanded to search suspected places without evidence of the fact committed, or to seize any person or persons not named, whose offences are not particularly described and supported by evidence, are dangerous to liberty, and ought not to be granted.

XII. That no freeman ought to be taken, imprisoned, or disseized of his freehold, liberties, or privileges, or outlawed or exiled, or in any manner destroyed or deprived of his life, liberty, or property, but by the law of the land.

XIII. That every freeman restrained of his liberty, is intitled to a remedy, to inquire into the lawfulness thereof, and to remove the same if unlawful, and that such remedy ought not to be denied or delayed.

XIV. That in all controversies at law respecting property, the ancient mode of trial by jury is one of the best securities of the rights of the people, and ought to remain sacred and inviolable.

XV. That the freedom of the press is one of the great bulwarks of liberty, and therefore ought never to be restrained.

XVI. That the people of this State ought not to be taxed, or made subject to the payment of any impost or duty, without the consent of themselves, or their representatives in General Assembly freely given.

XVII. That the people have a right to bear arms for the defence of the State; and as standing armies in time of peace are dangerous to liberty, they ought not to be kept up; and that the military should be kept under strict subordination to, and governed by the civil power.

XVIII. That the people have a right to assemble together, to consult for their common good, to instruct their representatives, and to apply to the legislature for redress of grievances.

XIX. That all men have a natural and unalienable right to worship Almighty God according to the dictates of their own consciences.

XX. That for redress of grievances, and for amending and strengthening the laws, elections ought to be often held.

XXI. That a frequent recurrence to fundamental principles is absolutely necessary to preserve the blessings of liberty.

XXII. That no hereditary emoluments, privileges, or honours ought to be granted or conferred in this State.

XXIII. That perpetuities and monopolies are contrary to the genius of a free state, and ought not be allowed.

XXIV. That retrospective laws, punishing facts committed before the existence of such laws, and by them only declared criminal, are oppressive, unjust, and incompatible with liberty, wherefore no *ex post facto* law ought to be made.

XXV. The property of the soil in a free government being one of the essential rights of the collective body of the people, it is necessary, in order to avoid future disputes, that the limits of the State should be ascertained with precision; and as the former temporary line between North and South-Carolina was confirmed and extended by commissioners, appointed by the legislatures of the two States, agreeable to the order of the late King George II. in council, that line, and that only, should be esteemed the southern boundary of this State; that is to say, beginning on the sea side at a cedar stake, at or near the mouth of Little river, being the southern extremity of Brunswick county, and running from thence a north-west course through the Boundary House which stands in thirty-three degrees fifty-six minutes, to thirty-five degrees north latitude, and from thence a west course, so far as is mentioned in the charter of King Charles II. to the late proprietors of Carolina. Therefore all the territory, seas, waters, and harbours, with their appurtenances, lying between the line above described, and the southern line of the State of Virginia, which begins on the sea-shore, in thirty-six degrees thirty-minutes north latitude, and from thence runs west, agreeable to the said charter of King Charles, are the right and property of the people of this State, to be held by them in sovereignty; any partial line, without the consent of the legislature of this State, at any time thereafter directed or laid out in any wise notwithstanding. Provided always, that this declaration of rights shall not prejudice any nation or nations of Indians from enjoying such hunting grounds as may have been, or hereafter shall be secured to them by any former or future legislature of this State. And provided also, That it shall not be construed so as to prevent the establishment of one or more governments westward of this State, by consent of the legislature. And provided further, That nothing herein contained shall affect the titles or possessions of in-

dividuals, holding or claiming under the laws heretofore in force, or grants heretofore made by the late King George II. or his predecessors, or the late lords proprietors, or any of them.

FRAME OF GOVERNMENT.

Whereas allegiance and protection are in their nature reciprocal, and the one should of right be refused when the other is withdrawn; and whereas George the Third, King of Great-Britain, and late sovereign of the British American Colonies, hath not only withdrawn from them his protection, but by an act of British legislature, declared the inhabitants of these States out of the protection of the British crown, and all their property found upon the high seas liable to be seized and confiscated to the uses mentioned in the said act; and the said George the Third has also sent fleets and armies to prosecute a cruel war against them, for the purpose of reducing the inhabitants of the said Colonies to a state of abject slavery; in consequence whereof, all government under the said King, within the said Colonies hath ceased, and a total dissolution of government in many of them hath taken place: and whereas the continental Congress having considered the premises, and other previous violations of the rights of the good people of America, have therefore declared, that the thirteen United Colonies are of right wholly absolved from all allegiance to the British crown, or any other foreign jurisdiction whatsoever; and that the said Colonies now are, and forever shall be, free and independent States: wherefore, in our present state, in order to prevent anarchy and confusion, it becomes necessary that government should be established in this State; therefore we, the representatives of the freeman of North-Carolina, chosen and assembled in Congress, for the express purpose of framing a constitution, under the authority of the people, most conducive to their happiness and prosperity, do declare, that a government for this State shall be established in manner and form following, to wit:

I. That the legislative authority shall be vested in two distinct branches, *both dependent on the people*, to wit, a SENATE, and HOUSE OF COMMONS.

II. That the Senate shall be composed of representatives annually chosen by ballot, one for each county in the State.

III. That the House of Commons shall be composed of representatives annually chosen by ballot, two for each county, and

one for each of the towns of Edenton, Newbern, Wilmington, Salisbury, Hillsborough, and Halifax.

IV. That the Senate and House of Commons, assembled for the purpose of legislation, shall be denominated, *THE GENERAL ASSEMBLY*.

V. That each member of the Senate shall have usually resided in the county in which he is chosen, for one year immediately preceding his election, and for the same time shall have possessed and continue to possess, in the county which he represents, not less than three hundred acres of land in fee.

VI. That each member of the House of Commons shall have usually resided in the county in which he is chosen, for one year immediately preceding his election, and for six months shall have possessed and continue to possess in the county which he represents, not less than one hundred acres of land in fee, or for the term of his own life.

VII. That all freemen of the age of twenty-one years, who have been inhabitants of any one county within the State twelve months immediately preceding the day of any election, and possessed of a freehold within the same county, of fifty acres of land for six months next before, and at the day of election, shall be entitled to vote for a member of the Senate.

VIII. That all freemen of the age of twenty-one years, who have been inhabitants of any county within the State twelve months immediately preceding the day of any election, and shall have paid public taxes, shall be entitled to vote for members of the House of Commons for the county in which he resides.

IX. That all persons possessed of a freehold in any town in this State having a right of representation, and also all freemen who have been inhabitants of any such town twelve months next before, and at the day of election, and shall have paid public taxes, shall be entitled to vote for a member to represent such town in the House of Commons. Provided always, That this section shall not entitle any inhabitants of such town to vote for members of the House of Commons for the county in which he may reside, nor any freeholder in such county who resides without or beyond the limits of such town, to vote for a member for said town.

X. That the Senate and House of Commons when met, shall each have power to choose a speaker, and other their officers; be judges of

the qualifications and elections of their members ; sit upon their own adjournments from day to day ; and prepare bills to be passed into laws. The two Houses shall direct writs of election for supplying intermediate vacancies, and shall also jointly, by ballot, adjourn themselves to any future day and place.

XI. That all bills shall be read three times in each House before they pass into laws, and be signed by the speaker of both Houses.

XII. That every person who shall be chosen a member of the Senate or House of Commons, or appointed to any office or place of trust, before taking his seat, or entering upon the execution of his office, shall take an oath to the State, and all officers shall also take an oath of office.

XIII. That the General Assembly shall, by joint ballot of both Houses, appoint judges of the supreme courts of law and equity, judges of admiralty, and attorney-general, who shall be commissioned by the governor, and hold their offices during good behaviour.

XIV. That the Senate and House of Commons shall have power to appoint the generals and field officers of the militia, and all officers of the regular army of this State.

XV. That the Senate and House of Commons, jointly, at their first meeting after each annual election, shall by ballot elect a governor for one year, who shall not be eligible to that office longer than three years in six successive years. That no person under thirty years of age, and who has not been a resident in this State above five years, and having in the State a freehold in lands and tenements above the value of one thousand pounds, shall be eligible as a governor.

XVI. That the Senate and House of Commons, jointly, at their first meeting after each annual election, shall by ballot elect seven persons to be a council of state for one year, who shall advise the governor in the execution of his office, and that four members shall be a quorum. Their advice and proceedings shall be entered in a journal to be kept for that purpose only, and signed by the members present to any part of which any member present may enter his dissent. And such journals shall be laid before the General Assembly, when called for by them.

XVII. That there shall be a seal of this State, which shall be kept by the governor, and used by him as occasion may require ;

and shall be called, *The Great Seal of the State of North-Carolina*, and shall be affixed to all grants and commissions.

XVIII. The governor for the time being shall be Captain-general and commander in chief of the militia ; and in the recess of the General Assembly shall have power, by and with the advice of the Council of State, to embody the militia for the public safety.

XIX. That the governor for the time being shall have power to draw for, and apply such sums of money as shall be voted by the General Assembly for the contingencies of government, and be accountable to them for the same. He also may, by and with the advice of the Council of State, lay embargoes, or prohibit the exportation of any commodity, for any term not exceeding thirty days at any one time, in the recess of the General Assembly ; and shall have the power of granting pardons and reprieves, except where the prosecution shall be carried on by the General Assembly, or the law shall otherwise direct ; in which case he may, in the recess, grant a reprieve until the next sitting of the General Assembly ; and may exercise all the other executive powers of government, limited and restrained as by this Constitution is mentioned, and according to the laws of the State. And on his death, inability or absence from the State, the speaker of the Senate for the time being, and in case of his death inability, or absence from the State, the speaker of the House of Commons, shall exercise the powers of government after such death, or during such absence or inability of the governor or speaker of the Senate, or until a new nomination is made by the General Assembly.

XX. That in every case where any officer, the right of whose appointment is by this constitution vested in the General Assembly, shall during their recess die, or his office by other means become vacant, the governor shall have power, with the advice of the Council of State, to fill up such vacancy by granting a temporary commission, which shall expire at the end of the next session of the General Assembly.

XXI. That the governor, judges of the supreme court of law and equity, judges of admiralty, and attorney-general, shall have adequate salaries during their continuance in office.

XXII. That the General Assembly shall, by joint ballot of both Houses, annually appoint a Treasurer or Treasurers for this State.

XXIII. That the governor and other officers offending against the State, by violating any part of this constitution, mal-administration, or corruption, may be prosecuted on the impeachment of the General Assembly, or presentment of the grand jury of any court of supreme jurisdiction in this State.

XXIV. That the General Assembly shall by joint ballot of both Houses, triennially appoint a secretary for this State.

XXV. That no persons who heretofore have been, or hereafter may be receivers of public monies, shall have a seat in either House of General Assembly, or be eligible to any office in this State, until such person shall have fully accounted for and paid into the treasury all sums for which they may be accountable and liable.

XXVI. That no treasurer shall have a seat either in the Senate, House of Commons, or Council of State, during his continuance in that office, or before he shall have finally settled his accounts with the public for all the monies which may be in his hands, at the expiration of his office belonging to the State, and hath paid the same into the hands of the succeeding treasurer.

XXVII. That no officer in the regular army or navy in the service and pay of the United States, of this or any other State, nor any contractor or agent for supplying such army or navy with cloathing or provisions, shall have a seat either in the Senate, House of Commons, or Council of State, or be eligible thereto; and any member of the Senate, House of Commons, or Council of State, being appointed to, and accepting of such office, shall thereby vacate his seat.

XXVIII. That no member of the Council of State shall have a seat either in the Senate or House of Commons.

XXIX. That no judge of the supreme court of law or equity, or judge of admiralty, shall have a seat in the Senate, House of Commons, or Council of State.

XXX. That no secretary of this State, attorney-general, or clerk of any court of record, shall have a seat in the Senate, House of Commons, or Council of State.

XXXI. That no clergymen or preacher of the gospel, of any denomination, shall be capable of being a member of either the Senate, House of Commons, or Council of State, while he continues in the exercise of the pastoral function.

XXXII. That no person who shall deny the being of God, or the truth of the Protestant religion, or the divine authority either of the Old or New Testament, or who shall hold religious principles incompatible with the freedom and safety of the State, shall be capable of holding any office, or place of trust or profit in the civil department within this State.

XXXIII. That the justices of the peace within their respective counties in this State, shall in future be recommended to the governor for the time being, by the representatives in General Assembly, and the governor shall commission them accordingly; and the justices, when so commissioned, shall hold their offices during good behaviour, and shall not be removed from office by the General Assembly, unless for misbehaviour, absence, or inability.

XXXIV. That there shall be no establishment of any one religious church or denomination in this State in preference to any other; neither shall any person, on any pretence whatsoever, be compelled to attend any place of worship contrary to his own faith or judgment; nor be obliged to pay for the purchase or any glebe, or the building of any house of worship, or for the maintenance of any minister or ministry, contrary to what he believes right, or has voluntarily and personally engaged to perform; but all persons shall be at liberty to exercise their own mode of worship. Provided, that nothing herein contained shall be construed to exempt preachers of treasonable or seditious discourses from legal trial and punishment.

XXXV. That no person in this State shall hold more than one lucrative office at any one time. Provided, that no appointment in the militia, or the office of a justice of the peace, shall be considered as a lucrative office.

XXXVI. That all commissions and grants shall run in the name of *The State of North-Carolina*, and bear test, and be signed by the governor. All writs shall run in the same manner, and bear test, and be signed by the clerks of the respective courts. Indictments shall conclude, *Against the peace and dignity of the State*.

XXXVII. That the delegates for this State to the Continental Congress, while necessary, shall be chosen annually by the General Assembly by ballot, but may be superseded in the mean time in the same manner; and no person shall be elected to serve in that capacity for more than three years successively.

XXXVIII. That there shall be a sheriff, coroner, or coroners, and constables, in each county within this State.

XXXIX. That the person of a debtor, where there is not a strong presumption of fraud, shall not be continued in prison, after delivering up *bonâ fide*, all his estate, real and personal, for the use of his creditors, in such manner as shall be hereafter regulated by law. All prisoners shall be bailable by sufficient sureties, unless for capital offences, when the proof is evident or the presumption great.

XL. That every foreigner who comes to settle in this State, having first taken an oath of allegiance to the same, may purchase, or by other just means acquire, hold and transfer land, or other real estate; and after one year's residence shall be deemed a free citizen.

XLI. That a school or schools shall be established by the legislature for the convenient instruction of youth, with such salaries to the masters, paid by the public, as may enable them to instruct at low prices; and all useful learning shall be duly encouraged and promoted in one or more universities.

XLII. That no purchase of lands shall be made of the Indian natives, but on behalf of the public, by authority of the General Assembly.

XLIII. That the future legislature of this State shall regulate entails in such manner as to prevent perpetuities.

XLIV. That the declaration of rights is hereby declared to be part of the Constitution of this State, and ought never to be violated on any pretence whatsoever.

XLV. That any member of either House of General Assembly shall have liberty to dissent from and protest against any act or resolve which he may think injurious to the public, or any individual, and have the reasons of his dissent entered on the journals.

XLVI. That neither house of the General Assembly shall proceed upon public business, unless a majority of all the members of such House are actually present; and that upon a motion made and seconded, the yeas and nays upon any question shall be taken and entered on the journals; and that the journals of the proceedings of both Houses of the General Assembly shall be printed and made public immediately after their adjournment.

This Constitution is not intended to preclude the present Congress from making a temporary provision for the well-ordering of this State, until the General Assembly shall establish a government agreeable to the mode herein before described.

This declaration of rights and frame of government was agreed to and resolved upon by the representatives of the freemen of the State of North-Carolina, elected and chosen for that particular purpose, in Congress assembled, at Halifax, December 18, 1776.

TERRITORY SOUTH OF THE OHIO,

OR THE

TENNESSE GOVERNMENT.

SITUATION, EXTENT, AND BOUNDARIES.

THIS part of the territory of the United States is situated between $6^{\circ} 20'$ and $16^{\circ} 30'$ west longitude from Philadelphia, and 35° and $36^{\circ} 30'$ north latitude; it extends three hundred and sixty miles in length and one hundred and five miles in breadth, and contains the whole of the tract of country ceded to the United States by the State of North-Carolina in the year 1789. It is bounded on the north by the State of Kentucky and part of Virginia, on the east by a range of mountains, which separates it from North-Carolina,* on the south by South-Carolina and Georgia, and on the west by the Mississippi.

C L I M A T E.

The climate in general is moderate and healthy. In the tract lying between the Great Island, as it is called, and the Kan-hawa, the summers are remarkably cool, and the air rather moist. South-west of this, as far as the Indian towns, the climate is much warmer, and the soil better adapted to the productions of the Southern States.

The diseases to which adults are most liable, are pleurifies, rheumatisms, and sometimes, though rarely, agues and fevers: so healthy have been the inhabitants, that from the first settlement of the country to 1788, not a single physician had settled among them. It is to the inhabitants a real advantage, that they are almost beyond the reach of those luxuries which are enjoyed, and those epidemical diseases which are consequently frequent in populous towns on the sea coast. An inhabitant of this dis-

* This range of mountains are known by the various names of the Allegany, Stone, Yellow, Iron and Bald mountains.

trist writes, " Our physicians are, a fine climate, healthy robust mothers and fathers, plain and plentiful diet, and enough of exercise : there is not a regular bred physician residing in the whole district."

FACE OF THE COUNTRY, &c.

Cumberland mountain, in its whole extent, from the Great Kanhawa to the Tennessee, consists of the most stupendous piles of craggy rocks of any mountain in the western country ; in several parts of it, for miles, it is inaccessible even to the Indians, on foot ; in one place particularly, near the summit of the mountain, there is a most remarkable ledge of rocks of about thirty miles in length and two hundred feet thick, shewing a perpendicular face to south-east more noble and grand than any artificial fortification in the known world, and apparently equal in point of regularity. Through this stupendous pile, *according to a modern hypothesis*, had the waters of all the upper branches of the Tennessee to force their way ; the attempt would have been impracticable at any other place than the one mentioned, for more than one hundred miles eastwardly. Here then seems to have been the chasm, left by the Creator, to convey off those waters which must otherwise have overflowed, and rendered useless a vast tract of valuable country enclosed within the mountains.

The Tennessee, called also the Cherokee, and absurdly the Hogohege river, is the largest branch of the Ohio ; it rises in the mountains of Virginia, latitude 37° , and pursues a course of about one thousand miles south and south-west, nearly to latitude 34° , receiving from both sides a number of large tributary streams it then wheels about to the north in a circuitous course, and mingles with the Ohio, nearly sixty miles from its mouth ; from its entrance into the Ohio to the Muscle shoals, a distance of two hundred and fifty miles, the current is very gentle, and the river deep enough, at all seasons, for the largest row boats : the Muscle shoals are about twenty miles in length. At this place the river spreads to the width of three miles, and forms a number of islands and is of difficult passage, except when there is a swell in the river. From these shoals to the whirl or suck, the place where the river breaks through the Great ridge, or Cumberland mountain, is two hundred and fifty miles, the navigation all the way excellent.

The Whirl, as it is called, is in about latitude 35° ; it is reckoned a greater curiosity than the bursting of the Potomack through the Blue ridge. The river, which a few miles above is half a mile wide, is here compressed to the width of about one hundred yards; just as it enters the mountain, a large rock projects from the northern shore in an oblique direction, which renders the bed of the river still narrower, and causes a sudden bend; the water of the river is of course, thrown with great rapidity against the southern shore, whence it bounds round the point of the rock and produces the whirl, which is about eighty yards in circumference. Canoes have often been carried into the whirl, and escaped by the dexterity of the rowers without damage. In less than a mile below the whirl the river spreads into its common width and, except the Muscle shoals already mentioned, flows beautiful and placid till it mingles with the Ohio.

Six miles above the whirl are the Chiccamogga towns, on the banks of the river, and of a large creek of the same name; from these towns to the mouth of the Hiwassee is sixty miles by water, and about forty by land; this river is a south branch of the Tennessee, and navigable till it penetrates the mountains on its south side. The climate, the fine springs, and fertile plains, render the banks of this river a most delightful place of settlement. From a branch of the Hiwassee, called Amoia, there is a short portage to a branch of the Mobile, and the road all the distance firm and level.

Passing up the Tennessee, sixty miles from the mouth of the river Hiwassee, you come to the mouth of Peleson or Clinch river from the north, which is large and navigable for boats upwards of two hundred miles, receiving in its course, besides inferior streams, Powell's river, which is nearly as large as the main river, and boatable for one hundred miles: this last-mentioned river runs through Powell's valley, an excellent tract of country abounding with fine springs.

From the Peleson to the junction of the Holstein and Tennessee is computed forty miles; this last is the branch which formerly gave its name to the main river, not from its size, but from its notoriety, having on its banks a vast number of Indian villages, and the chief town of Cherokee Indians, called Chota, and was therefore called Cherokee river; but the name of Tennessee has of late obtained a preference; it crosses the valley at nearly right

angles with the mountains, and has on its banks a number of beautiful plains, which are chiefly improved as corn fields by the Indians. In 1788, the whites had advanced their settlements within ten miles of the Indian villages. Forty miles from the Tennessee up the Holstein branch, comes in Frank river, vulgarly called French Broad, four or five hundred yards wide ; thence, pursuing the Holstein two hundred miles, you come to Long Island, which is the highest navigation yet used ; thence about one hundred miles is the source of the river. One mile below Long Island comes in North-Holstein, and twenty miles above it the Watauga ; the former is one hundred yards wide at its mouth, and with a small expence might be made navigable to Campbell's Salines, seventy miles farther up. In the Tennessee and its upper branches are great numbers of fish, some of which are very large and of an excellent flavour.

The head waters of the Great Kanhawa are in the western part of North-Carolina, in the most eastern ridge of the Alleghany or Appalachian mountains, and south of the 36° of latitude. Its head branches encircle those of the Holstein, from which they are separated by the Iron mountain, through which it passes, ten miles above the lead mines ; thence steering its course along the foot of the Alleghany mountain, until it receives Little river from the east, it turns to the north, which is its general course till it meets the Ohio. About sixty miles from Little river it receives Green Briar river from the east, which is the only tributary stream in all that distance. About forty miles below the mouth of Green Briar river, in Virginia, in the Kanhawa, is a remarkable cataract. A large rock, a little elevated in the middle, crosses the bed of the river, over which the water shoots and falls about fifty feet perpendicularly, except at one side, where the descent is more gradual.

The Shawanhee, now called Cumberland river, of the southern branches of the Ohio, is next in size to the Tennessee, and extends eastwardly nearly as far, but runs in a much more direct course ; it is navigable for small craft as far as Nashville ; from the south it receives Harper's, Coney, Obey's and Clear Fork rivers ; and from the north, Red and Rock Castle rivers, besides many smaller streams.

Of this territory, above half is covered with mountains which are uninhabitable ; some of these, particularly Cumberland, or Great Laurel ridge, are the most stupendous piles in the United States ; they abound with ginseng and stone coal. Clinch

mountain is south of these, in which Burk's garden and Morris's nob might be described as curiosities.

The Iron mountain, which constitutes the boundary between this district and North-Carolina, extends from near the lead mines, on the Kanhawa, through the Cherokee county, to the south of Chota, and terminates near the sources of the Mobile. The caverns and cascades in these mountains are innumerable.

SOIL AND PRODUCTIONS.

The farmers on Cumberland river, for the sake of describing their lands, distinguish them by first, second and third quality. Land of the first quality will bear Indian corn or hemp, but it will not bear wheat without great reduction. Land of the second quality does not bear wheat to advantage until it has been reduced by two or three crops of corn, hemp, tobacco or cotton. Land of the third bears every kind of grain that is usually sown on dry ground in the Atlantic States. It is agreed by all who have visited the Cumberland settlement, that one hundred bushels of Indian corn are frequently gathered from an acre of their best land; sixty or seventy bushels from an acre is very common, but the farmer who expects to gather such a crop must be careful, while the corn is soft, to guard it against bears and racoons. Wheat, barley, oats, rye, buck-wheat, Indian corn, pease, beans, potatoes, flax, hemp, tobacco, indigo, rice and cotton, have already been planted in that settlement, and they all thrive in great perfection: the usual crop of cotton is eight hundred pounds to the acre, the staple is long and fine. It is alledged, however, that the lands on the small rivers that run into the Mississippi, have a decided preference to those on the Cumberland river, for the production of cotton and indigo. No experiments have been made on land near the Mississippi within the ceded territory; but there is a small settlement farther down the river, within the limits of the United States, on a similar soil, where the growth and quality of cotton is so remarkable, that its culture is more profitable than any other crop. The soil on those rivers is deep and light, having a small mixture of sand with a black earth; hence, as the planters alledge, it proves favourable to the culture of all kinds of roots, as well as of indigo and cotton.

The lands on the waters of Tennessee and Cumberland rivers are generally well timbered; in some places there are glades of

rich land without timber, but these are not frequent nor large. The general growth is poplar, hickory, black walnut, buck eye or the horse chestnut, lycamore, locust and the sugar maple. The under-growth, in many places, is cane fifteen or twenty feet high, so close together as to exclude all other plants: where the cane does not abound, we find red bud, wild plum, spice wood, red and white mulberry, ginseng, Virginia and Seneca snake root, angelica, sweet anise, ginger and wild hops. The glades are covered with clover, wild rye, buffalo grass and pea vine. On the hills, at the head of rivers, we find stately red cedars; many of these trees are four feet in diameter, and forty feet clear of limbs.

A few years since, this country abounded with large herds of wild cattle, improperly called buffaloes; but the improvident or ill-disposed among the first settlers have destroyed multitudes of them out of mere wantonness; they are still to be found on some of the south branches of Cumberland river. Elk, or moose, are seen in many places, chiefly among the mountains. The deer are become comparatively scarce, so that no person makes a business of hunting them for their skins only. Enough of bears and wolves yet remain. Beavers and otters are caught in plenty in the upper branches of Cumberland and Kentucky rivers.

They have pheasants, partridges or quails, and turkies in abundance through the year. During the winter their waters are covered with swans, wild geese, brant and duck. Cat-fish have been caught in those rivers that weighed above one hundred pounds, and perch that weighed above twenty pounds.

The mammoth appears to have been an inhabitant of this country, as his bones have been dug up by labourers at Campbell's Salines, on North-Holstein, when sinking salt pits; they were from three to seven feet below the surface of the earth.

Campbell's salines are the only ones that have yet been discovered on the upper branches of the Tennessee and on this side the wilderness, though great search has been made for them. The tract which contains these salines is a great natural curiosity; it was discovered by Captain Charles Campbell about 1745, who was one of the first explorers of the western country. In 1753, he procured a patent for it from the governor of Virginia. His son the late General William Campbell, who behaved so gallantly in the American war in the years 1780 and 1781, became owner of it on his death. But it was not till the time

of his death, when salt was very scarce and dear, that salt water was discovered, and salt made by a poor man; since that time, under the direction of Colonel Arthur Campbell, it has been improved to a considerable extent, and many thousands of inhabitants are supplied from it with salt of a superior quality, and at a low price. The tract consists of about three hundred acres of flat marsh land, of as rich a soil as can be imagined: in this flat, pits are sunk in order to obtain the salt water; the best is found from thirty to forty feet deep. After passing through the rich soil or mud, from six to ten feet, you come to a very brittle lime-stone rock, with cracks or chasms, through which the salt water issues into the pits, whence it is drawn by buckets and put into the boilers, which are placed in furnaces adjoining the pits. The hills that surround this flat are covered with fine timber, and not far distant a coal mine has been discovered.

On Frank river, about thirty miles in a direct line from its mouth, a large, clear, medicinal spring has lately been discovered, which, on experiment, has been found to relieve various complaints of the human body; its temperature rather exceeds blood heat.

On the same river, nearer its mouth, a valuable lead mine has been discovered.

On the banks of the Holstein are many mines of iron ore, of the best kind, some of which have been opened and worked to advantage, and enough might be made to supply the whole western country: these mines are the most valuable, as there is said to be none of this ore near the Mississippi, and very little north of the Ohio.

Up the Hiwassee river, in the mountains on the south side, a mine has been discovered and ore taken, from which, it is said, gold was extracted by an artist, while the British were in possession of Georgia: it is certain, that but few Indians know the spot and those who do are very anxious to keep it a secret: the gentleman who gave this information has been within view of the place. The mountain is very high and barren, and has several of the appearances described by mineralists. The discovery was made by means of the river undermining the base of a large cliff or spur of the mountain, which occasioned a great column of the earth or rock to tumble into the water: this disrapture discovered the vein of yellow metal at a great depth.

CIVIL DIVISIONS AND CHIEF TOWNS.

This territory is divided into two districts, each of which is again divided into counties as follows:

WASHINGTON DISTRICT.

Washington,	Greene,	South, of French
Sullivan,	Hawkins,	Broad.

MERO DISTRICT.

Davidson,	Sumner,	Tennessee.
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The chief towns are Nashville and Abingdon.

NASHVILLE.

This is the shire town of Davidson county, and is the largest town in the territory. The courts are held here; it has two houses for public worship, and a handsomely endowed academy, established in 1786.

ABINGDON.

Abingdon is the county town of Washington county: it contained in 1788 about twenty houses, and was rapidly increasing: it is about two hundred and sixty miles from Richmond in Virginia, in a direct line, and three hundred and ten as the road runs, bearing a little to the south of west latitude $36^{\circ} 30'$.

R O A D S.

The following are the distances on the new road from Nashville, in Davidson county, to Fort Campbell, near the junction of Holstein river with the Tennessee.

	Miles.		Miles.
From Nashville to Stony river	9	Smith's creek	- 6
Big spring	- 6	Coney river	- 11
Cedar lick	- 4	Mine lick	- 9
Little spring	- 6	Falling creek	- 9
Barton's creek	- 4	War path	- 7
Spring creek	- 5	Bear creek	- 18
Martin's spring	- 5	Camp creek	- 8
Blair's spring	- 5	King's spring	- 16
Buck spring	- 12	Grovet's creek	- 7
Fountaines	- 3		

	Miles.		Miles.
From foot of Cumberland		To Campbell's station,	
mountain -	2	near Holstein	10
Through the mountain		To the Great island	100
to Emmery's river, a		To Abingdon in Wash-	
branch of the Peleson	11	ington county	35
To the Pappa ford of the		To Richmond in Virgi-	
Peleson or Clinck ri-		nia	310
ver -	12		
		Total	635

By this new road, a pleasant passage may be had to the western country with carriages, as there will be only the Cumberland mountain to pass, and that is easy of ascent: and beyond it, the road is generally level and firm, abounding with fine springs of water.

P O P U L A T I O N .

In 1765, there were but about ten families settled west of the Kanhawa, so many had joined them in 1773, that the settlement was erected into a county, and in 1776, again subdivided into three.—In 1788, the number of inhabitants was reckoned at forty thousand: they must have greatly increased since that period—the following is the return made by the governor in 1791

WASHINGTON DISTRICT.

COUNTIES.	Free white males of 21 years and upwards.	Free white males under 21 years.	Free white females.	All other free persons.	Slaves.	Total.
Washington - - -	100	1792	2524	12	535	5872
Sullivan - - -	806	1242	1995	107	297	4447
Greene - - -	1292	2374	3580	40	454	7741
Hawkins - - -	1204	1970	2921	68	807	6970
South of French Broad } Broad }	681	1082	1627	66	163	3619
	4993	8460	12647	292	2256	28640

MERO DISTRICT.

Davidson - - -	639	855	1288	18	659	3459
Sumner - - -	404	582	854	8	348	2196
Tennessee - -	235	380	576	42	154	1387
	1278	1817	2718	68	1161	7042

To this return the following note was prefixed: There are several captains who have not as yet returned the schedules of the numbers of their districts, namely;—in Greene county, three—in Davidson, one—and South of French Broad, one district.

Though it is manifest the deficiency in this return is great, yet we have not sufficient data to determine it, but we may reasonably suppose the present number of inhabitants to exceed sixty thousand.

In 1788, the militia of this district amounted to between seven and eight thousand effective men, who were principally armed with rifles. It is supposed that their number is increased to nearly double since that period.

RELIGION AND CHARACTER.

The Presbyterians are the prevailing denomination of Christians in this district: they have a Presbytery, called the Abington Presbytery, established by act of synod, which, in 1788,

consisted of twenty three large congregations, who were then supplied by only six ministers. There are also some of the Baptists and Methodist denominations.

The inhabitants of this district emigrated chiefly from Pennsylvania, and that part of Virginia which lies west of the Blue ridge. The ancestors of these people were generally of the Scotch nation, some of whom emigrated first to Ireland, and from thence to America. A few Germans and English are intermixed. The proportion of the whites to the blacks in this district, judging from the foregoing imperfect census, is as ten to one. In 1788 it was thought there were twenty white persons to one negro. The erection of this territory into a separate government, it is believed, will tend to lessen the negro population.

There is nothing in the character of this people that distinguishes them from the settlers of new countries in general. Among the bulk of the inhabitants a great simplicity of manners prevails; duplicity, or the etiquette of cities and populous places, is unknown among them. If a man deceives another, he is deemed and called a liar; and it frequently happens that "a bloody nose" is the consequence. Wrestling, jumping, running foot races, and playing at ball, are the common diversions. Dancing is coming into fashion. Card playing is a rare amusement. The hunting shirt is still worn by the militia on duty, and by hunters in pursuit of game. At home, and at public assemblies, they dress like the Virginians.

Great was the damage sustained by the inhabitants of this country during the war, occasioned by the incursions of the Indians; and it is much to their honour, that when they were offered protection by the British, in the early stage of the war, they nobly refused it.

COMMERCE.

As the waters of the Cumberland from Nashville, and of the Tennessee from the Muscle shoals to the Ohio, are navigable to the Ohio an Mississippi, the people of course, who live in the interior of the country, have the same advantages of water conveyance for trade, as those who live on the Ohio or Mississippi, to New Orleans or elsewhere.

Besides, there is another probable avenue through which trade will be carried on with this country, which is from Mobile up the waters of the Mobile river as far as it is navigable, thence by a land carriage of about fifty miles, at most, to Ocochappo creek.

which empties into the Tennessee at the lower end of the Muscle shoals. The mouth of this creek is the center of a piece of ground, the diameter of which is five miles, ceded by the southern Indians at the treaty of Hopwell, on Keowee, to the United States, for the establishment of trading posts.

This country furnishes many valuable articles of export, such as fine waggon and saddle horses, beef, cattle, ginseng, deer skins and furs, cotton, hemp, and flax, which may be transported by land; also iron, lumber, pork, and flour, which might be exported in great quantities, if the navigation of the Mississippi were opened; but there are few of the inhabitants who understand commerce, or are possessed of proper capitals; of course it is badly managed: land jobbing engrosses too much of the attention of the inhabitants. The degraded state of commerce has rendered necessary a general attention to home manufactures: and it is to be hoped that the eyes of the people will soon be opened to their true interest, and agriculture, commerce, and manufactures, each receive proper attention.

LEARNING AND LITERATURE.

The inhabitants of this district have not been inattentive to the interests of science. An academy and several grammar schools have been established; and a society, who stile themselves, "A Society for promoting Useful Knowledge:" it is of modern date, but much good is expected from it. A taste for literature is increasing among them.

The government is similar to that established by Congress in the territory of the United States, north-west of the Ohio. The governor is the executive, and, in his absence, the secretary, and the governor and three judges the legislative power in the district.

The public revenue amounts to about five or six thousand pounds, raised chiefly by a tax on slaves, lands, and horses.

INDIANS.

The Indian tribes, within and in the vicinity of this district, are the Cherokees and Chickasaws. The Cherokees have been a warlike and numerous nation; but by continual wars, in which it has been their destiny to be engaged with the northern Indian tribes, they were reduced, at the commencement of

the last war, to about two thousand fighting men; since which they have been reduced more than one half, and have become weak and pusillanimous.

The Chicafaws, of all the Indian tribes within the limits of the United States, merit the most from the Americans, having at all times maintained a brotherly attachment to them: they glory in saying, that they never shed the blood of an Anglo-American. There is so great an affinity between the Chicafaw and Choctaw languages, that the common people can converse together, each speaking in his own dialect. They are a personable people, and have an openness in their countenances and behaviour, uncommon among savages. These nations say, they are the remnant of a great nation that once lived far to the west, which was destroyed by the Spaniards, for whom they still retain an hereditary hatred. Would it not be the policy of Congress to treat with these nations? and might not a reciprocal friendship be mutually serviceable to the Union and the Indians?

STATE OF SOUTH-CAROLINA.

SITUATION, EXTENT, AND BOUNDARIES.

THIS State is situated between 32° and 35° north latitude, and 4° and 9° west longitude from Philadelphia. Its length is two hundred miles, and its breadth one hundred and twenty-five. It is bounded on the north by North-Carolina, on the east by the Atlantic ocean, on the south-west and south by Savannah river, and a branch of its head waters called Tugulo river, which said rivers divide it from the State of Georgia.*

CLIMATE.

The climate of this State is different in different parts: along the sea coast, billious diseases, and fevers of various kinds,

* The boundary line dividing the two States of South-Carolina and Georgia was long the subject of controversy; the former claiming the lands lying between the North-Carolina line, and a line to run due west from the mouth of Tugulo and Keowee river; the latter contended that the source of Keowee river was to be considered as the head of Savannah river.

For the purpose of settling this controversy, commissioners were appointed in April 1787, by the contending States, vested with full powers to determine the controverted boundary, which they fixed as follows:

“ The most northern branch or stream of the river Savannah, from the sea or mouth of such stream, to the fork or confluence of the rivers now called Tugulo and Keowee, and from thence the most northern branch or stream of the said river Tugulo, till it intersects the northern boundary line of South-Carolina, if the said branch of Tugulo extend so far north, reserving all the islands in the said rivers Savannah and Tugulo to Georgia; but if the said branch or stream of Tugulo does not extend to the north boundary line of South-Carolina, then a west line to the Mississippi to be drawn from the head spring or source of the said branch of Tugulo river, which extends to the highest northern latitude, shall for ever hereafter form the separation, limit and boundary between the States of South-Carolina and Georgia.”

are prevalent between July and October. The probability of dying is much greater between the 20th of June and the 20th of October, than in the other eight months in the year.

One cause of these diseases is, a low marshy country, which is overflowed for the sake of cultivating rice. The exhalations from these stagnated waters, from the rivers and from the neighbouring ocean, and the profuse perspiration of vegetables of all kinds, which cover the ground, fill the air with moisture: this moisture falls in frequent rains and copious dews. From actual observation it has been found that the average annual fall of rain for ten years was forty-two inches, without regarding the moisture that fell in fogs and dews. The great heat of the day relaxes the body, and the agreeable coolness of the evening invites to an exposure to these heavy dews.

The disagreeable effects of this climate, experience has proved, might in a great measure be avoided by those inhabitants, whose circumstances will admit of their removal from the neighbourhood of the rice swamps to healthier situations, during the months of July, August, September, and October; and in the worst situations, by temperance and care. Violent exercise on horseback, but chiefly, exposure to the meridian rays of the sun, sudden showers of rain, and the night air, are too frequently the causes of fevers and other disorders. Would the sportsman deny themselves, during the fall months, their favourite amusements of hunting and fishing, or confine themselves to a very few hours, in the morning or evening; would the industrious planter visit his fields only at the same hours; or would the poorer class of people pay due attention to their manner of living, and observe the precautions recommended to them by men of knowledge and experience, much sickness and many distressing events might be prevented. The upper country, situated in the medium between extreme heat and cold, is as healthful as any part of the United States.

FACE OF THE COUNTRY, SEA COAST, &c.

The whole State, to the distance of eighty miles from the sea, is level, and almost without a stone. In this, distance, by a gradual ascent from the sea coast, the land rises about one hundred and ninety feet. Here, if you proceed in a W. N. W. course from Charleston commences a curiously uneven country, presenting a prospect something like that of a high swelling sea,

formed by a prodigious number of small sand hills. Some little herbage, and a few small pines grow, even on this soil. The inhabitants are but few, and have but a scanty subsistence on corn and sweet potatoes, which grow here tolerably well. This curious country continues for sixty miles, till you arrive at a place called the Ridge, one hundred and forty miles from Charleston. This ridge is a remarkable tract of high ground, as you approach it from the sea, but level as you advance north-west from its summit. It is a fine high, healthy belt of land, well watered, and of a good soil, and extends from the Savannah to Broad river, in about $6^{\circ} 30'$ west longitude from Philadelphia. Beyond this ridge commences a country exactly resembling the northern States. Here hills and dales, with all their verdure and variegated beauty, present themselves to the eye. Wheat fields, which are rare in the low country, begin to be common. Here Heaven has bestowed its blessing with a most bounteous hand. The air is much more temperate and healthful than nearer the sea. The hills are covered with valuable woods; the vallies watered with beautiful rivers, and the fertility of the soil is equal to every vegetable production. This, by way of distinction, is called the Upper Country, where are different modes and different articles of cultivation; where the manners of the people, and even their language, have a different tone. The land still rises by a gradual ascent; each succeeding hill overlooks that which immediately precedes it, till, having advanced two hundred and twenty miles in a north-west direction from Charleston, the elevation of the land above the sea coast is found to be eight hundred feet. Here a mountainous country commences with the Tryon and Hogback mountains; the elevation of which, above their base, is three thousand eight hundred and forty feet, and above the sea coast four thousand six hundred and forty. From the top of these mountains there is an extensive view of this State. North-Carolina, and Georgia: and as no object intervenes to obstruct the view, a man with telescopic eyes might discern vessels at sea. The mountains west and north-west rise much higher than these, and form a ridge which divides the waters of Tennessee and Santee rivers.

This State is watered by four large navigable rivers, besides a great number of smaller ones, which are passable in boats. The river Savannah washes it in its whole length from south-east to north-west. The Edisto rises in two branches from a remarkable ridge in the interior part of the State. These branches unite below Orangeburgh, which stands on the North

Fork, and Edisto river, which, having passed from Jacksonburgh, leaving it on the south, branches and embraces Edisto island.

Santee is the largest and longest river in this State: it empties into the ocean by two mouths, a little south of George-town. About one hundred and twenty miles in a direct line from its mouth, it branches into the Congaree and Wateree; the latter or northern branch passes the Catabaw nation of Indians, and bears the name of the Catabaw river from this settlement to its source. The Congaree branches into Saluda and Broad rivers. Broad river again branches into Enoree, Tyger and Pacolet rivers, on the latter of which are the celebrated Pacolet springs.

Pedee river rises in North-Carolina, where it is called Yadenkin river: in this State, however, it takes the name of Pedee; and, receiving the waters of Lynche's creek, Little Pedee, and Black river, it joins the Wakkamaw river, near George-town. These united streams, with the accession of a small creek, on which George-town stands, from Winyaw bay, which, about twelve miles below, communicates with the ocean. All these rivers, Edisto excepted, rise from various sources in that ridge of mountains which divides the waters which flow into the Atlantic ocean, from those which fall into the Mississippi.

The rivers of a secondary size, as you pass from north to south, are Wakkamaw, Black river, Cooper, Ashepoo, and Combahee. These rivers afford, to the proprietors of their banks, a considerable quantity of tide swamp or rice land, flooded from the rivers, except in extraordinary droughts.

In the third class are comprehended those rivers which extend but a short distance from the ocean, and serve, by branching into numberless creeks, as drains to take off the quantity of rain water which comes down from the large inland swamps; or are merely arms of the sea; of this kind are Ashley, Stono, Coosaw, Broad, Colleton, May, New, and Right's rivers. The tide, in no part of this State, flows more than twenty five miles from the sea.

A company has been incorporated for the purpose of connecting Cooper and Santee rivers by a canal of twenty-one miles in length. The sum supposed to be necessary to complete this extensive work is fifty-five thousand six hundred and twenty pounds sterling. Twenty-five per cent. are allowed by the legislature in tolls for all monies advanced by stockholders. The ad-

vantage of a canal at this place, to one who inspects a map of the Carolinas, must appear to be great, both to the public and to the proprietors.

The only harbours of note are those of Charleston, Port Royal, and George-town. Charleston harbour is spacious, convenient, and safe: it is formed by the junction of Ashley and Cooper rivers: its entrance is guarded by fort Johnson. Twelve miles from the city is a bar, over which are four channels; one by the name of Ship Channel, has eighteen feet water; another sixteen and a half; the other two are for smaller vessels. The tides rise from five to eight feet. Port Royal has an excellent harbour, of sufficient extent to contain the largest fleet in the world.

The bar at the entrance of Winyaw bay, which leads to George-town, does not admit of vessels drawing more than eleven feet water; and is, in many respects, a very dangerous place. This circumstance has proved injurious to the growth of George-town, which is otherwise exceedingly well situated for all the purposes of an extensive trade.

The sea coast is bordered with a chain of fine sea islands, around which the sea flows, opening an excellent inland navigation for the conveyance of produce to market.

North of Charleston harbour lie Bull's, Dewee's, and Sullivan's islands, which form the north part of the harbour. James island lies on the other side of the harbour, opposite Charleston, containing about fifty families. Further south-west is John's island, larger than James; Stono river, which forms a convenient and safe harbour, divides these islands. Contiguous to John's island, and connected with it by a bridge, is Wadmelaw; east of which are the small isles of Keyway and Simmon. Between these and Edisto island is N. Edisto inlet, which also affords a good harbour for vessels of easy draft of water. South of Edisto island is S. Edisto inlet, through which enter, from the northward, all the vessels bound to Beaufort, Ashepoo, Combahee and Coolaw.

On the south-west side of St. Helena island lies a cluster of islands, one of the largest of which is Port Royal. Adjacent to Port Royal lie St. Helena, Ladies island, Paris island, and the Hunting islands, five or six in number, bordering on the ocean, so called from the number of deer and other wild game found upon them. All these islands, and some others of less note, belong to St. Helena parish.

Crossing Broad river, you come to Hilton Head, the most southern sea island in Carolina. West and south-west of Hilton Head lie Pickney's, Bull's, Dawfuskie's, and some smaller islands,

between which and Hilton Head are Calibogie river and sound, which form the outlet of May and New rivers.

SOIL AND PRODUCTIONS.

The soil of this State may be divided into four kinds ; first, the pine barren, which is valuable only for its timber. Interspersed among the pine barren are tracts of land free of timber, and every kind of growth but that of grass. These tracts are called savannahs, constituting a second kind of soil, good for grazing. The third kind is that of the swamps and low grounds on the rivers, which is a mixture of black loam and fat clay, producing naturally canes in great plenty, cypress, bays, loblolly pines, &c. In these swamps rice is cultivated, which constitutes the staple commodity of the State. The high lands, commonly known by the name of oak and hickory lands, constitute the fourth kind of soil. The natural growth is oak, hickory, walnut, pine, and locust. On these lands, in the low country, Indian corn is principally cultivated ; and in the back country, besides this, they raise tobacco in large quantities, wheat, rye, barley, oats, hemp, flax, cotton, and silk.

There is little fruit in this State, especially in the lower parts of it. The oranges are chiefly sour ; figs are plenty ; a few limes and lemons, pomegranates, pears, and peaches, apples are scarce, and are imported from the northern States. Melons, especially the water melon, are raised here in great perfection.

The river swamps, in which rice can be cultivated with any tolerable degree of safety and success, do not extend higher up the rivers than the head of the tides ; and in estimating the value of this species of rice land, the height which the tide rises is taken into consideration, those lying where it rises to a proper pitch for overflowing the swamps being the most valuable. The best inland swamps, which constitute a second species of rice land, are such as are furnished with reservoirs of water. These reservoirs are formed by means of large banks thrown up at the upper parts of the swamps, whence it is conveyed, when needed to the fields of rice.

The soil on the islands is generally better adapted to the culture of indigo than the main, and less suited to rice : cotton grows very well upon them. The natural growth is the live oak, which is so excellent for ship timber, and the palmetto or cabbage tree, the utility of which, in the construction of forts, was experienced during the late war.

At the distance of about one hundred and ten miles from the sea, the river swamps terminate, and the high lands extend quite to the rivers, and form banks, in some places, several hundred feet above the surface of the water, and afford many extensive and delightful views. These high banks are interwoven with layers of leaves and different coloured earth, and abound with quarries of free-stone, pebbles, flint, chrystals, iron ore in abundance, silver, lead, sulphur, and coarse diamonds.

The swamps above the head of the tide are occasionally planted with corn, cotton, and indigo. The soil is very rich, yielding from forty to fifty bushels of corn an acre.

It is curious to observe the gradations from the sea coast to the upper country, with respect to the produce, the mode of cultivation, and the cultivators. On the islands, upon the sea coast, and for forty or fifty miles back, and on the rivers much farther, the cultivators are all slaves. No white man, to speak generally, ever thinks of settling a farm and improving it for himself without negroes. If he has no negroes, he hires himself as overseer to some rich planter, who has more than he can or will attend to, till he can purchase for himself. The articles cultivated are corn and potatoes, which with the small rice, are food for the negroes; rice, indigo and cotton, for exportation. The culture of this last article is capable of being increased equal to almost any demand. The soil was cultivated, till lately, almost wholly by manual labour. The plough, till since the peace, was scarcely used: now, the plough and harrow and other improvements are introduced into the rice swamps with great success, and will no doubt become general. In the middle settlements, negroes are not so numerous; the master attends personally to his own business. The land is not properly situated for rice: it produces moderately good indigo weed, and some tobacco is raised for exportation. The farmer is contended to raise corn, potatoes, oats, rye, poultry, and a little wheat. In the upper country, there are but few negroes; generally speaking, the farmers have none, and depend, like the inhabitants of the northern States, upon the labour of themselves and families for subsistence; the plough is used almost wholly. Indian corn in great quantities, wheat, rye, potatoes, &c. are raised for food, and much tobacco and some wheat, cotton and indigo, for exportation.

Rice ground is prepared only by effectually securing it from the water, except some higher parts of it, which are sometimes

dug up with a hoe, or mellowed by a plough or harrow. When the rice is young, the overflowing of the water does not prevent its growth. Those who have water in reserve, commonly let it in upon their rice, after first going through with the hoe, while it is young, though it is deemed best to keep out the grass by the hoe only. The water is commonly kept on the rice eight or ten days after hoeing. When the ear is formed, the water is continued on till it is ripe: it is hoed three or four times. When the grass is very thick, a negro cannot hoe more than one sixteenth of an acre in a day. From three pecks to a bushel is sown on an acre. It produces from fifty to eighty bushels of rough rice an acre; one hundred and twenty bushels of rough rice have been produced on one acre; twenty bushels of which make about five hundred pounds, or eight and a quarter bushels clean rice for market. After it is threshed, it is winnowed, and then ground in a mill, constructed of two blocks in a simple manner; then winnowed by a fan constructed for that purpose, then beat in a mortar by hand, or, now generally, by horse or water machines, then sifted, to separate the whole rice from that which is broken and the flour. The whole rice is then barrelled in casks of about five hundred pounds, or eight and a quarter bushels. The small rice serves for provisions, and the flour for provender, the chaff for manure, and the straw for fodder. The blade is green and fresh while the ear is ripe. The price is in the general from nine shillings and four-pence, to ten shillings and six-pence a hundred; reckoning the dollar at four shillings and eight-pence.

CIVIL DIVISIONS.

The proprietors who first sent settlers to Carolina, divided it into counties and parishes. The counties were generally named after the proprietors. No county courts, however, were established, and this division, though for a long time kept up in the province, became in a great measure obsolete, previous to the revolution: since the revolution, county courts have been established, and the State is now divided into districts and counties, and the counties are subdivided; in the lower country into parishes, and in the upper country into smaller or voting districts.

There are seven principal districts, in which are contained thirty-five counties, as follows:

BEAUFORT DISTRICT,

On the sea coast between Combatee and Savannah rivers.

Hilton,	Lincoln,	Granville.
Shrewsbury,		

CHARLESTON DISTRICT,

Between Santee and Combahee rivers.

Charleston,	Marion,	Colleton,
Washington,	Berkeley,	Bartholomew.

GEORGE-TOWN DISTRICT.

Between Santee river and North-Carolina.

Weniah,	Kingston,	Liberty.
Williamsburgh,		

ORANCEBURGH DISTRICT,

West of Beaufort District.

Louisburgh,	Lexington,	Winton.
Orange,		

CAMDEN DISTRICT,

West of George-Town District.

Clarendon,	Clermont,	York,
Richland,	Lancaster,	Chester.
Fairfield,		

CHERAWS DISTRICT,

West of George-Town District.

Malborough,	Chesterfield,	Darlington.
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NINETY-SIX DISTRICT,

Comprehending all the other parts of the State.

Abberville,	Union,	Grenville,
Edgefield,	Laurens,	Pendleton.
Newbury,	Spartenburgh,	

The committee appointed by the act of Assembly to divide the districts into counties, were to lay them as nearly forty miles square as was practicable, due regard being paid to situations, natural boundaries, &c.

CHIEF TOWNS.

CHARLESTON.

Charleston is the only considerable town in South-Carolina: it is situated on the tongue of land which is formed by the confluence of Ashley and Cooper rivers, which are large and navigable. These rivers mingle their waters immediately below the town, and form a spacious and convenient harbour, which communicates with the ocean just below Sullivan's island: which it leaves on the north, seven miles south-east of the town. In these rivers the tide rises, in common about six feet and a half.* The continued agitation which this occasions in the waters which almost surround Charleston: the refreshing sea breezes which are regularly felt, and the smoke rising from so many chimneys, render Charleston more healthy than any part of the low country in the southern States. On this account it is the resort of great numbers of gentlemen, invalids from the West-India islands, and of the rich planters from the country, who come here to spend the sickly months, as they are called, in quest of health and of the social enjoyments which the city affords; and in no part of America are the social blessings enjoyed more rationally and liberally than in Charleston. Unaffected hospitality, affability, ease in manners and address, and a disposition to make their guests welcome, easy, and pleased with themselves, are characteristics of the respectable people in Charleston.

The land on which the town is built is flat and low, and the water brackish and unwholesome. The streets from east to west extend from river to river, and, running in a straight line, not only open beautiful prospects each way, but afford excellent opportunities, by means of subterraneous drains, for removing all nuisances, and keeping the city clean and healthy. These streets are intersected by others, nearly at right angles, and throw the town into a number of squares, with dwelling houses in front, and office houses and little gardens behind. Some of the streets are conveniently wide, but most of them are much too narrow, especially for so populous a city, in so warm a climate. Besides their being a nursery for various diseases from their confined situation, they have been found extremely inconvenient in

* It is worthy of remark, that the tide uniformly rises considerably higher in the night than in the day; often from ten to twelve inches. The fact is certain; the cause is unknown.

case of fires, the destructive effects of which have been frequently felt in this city. The houses, which have been lately built, are brick, with tiled roofs. Some of the buildings in Charleston are elegant, and most of them are neat, airy, and well furnished. The public buildings are, an exchange, state house lately rebuilt, armoury, poor house, two large churches for Episcopalians, two for Congregationalists, or Independents, one for Scotch Presbyterians, one for Baptists, one for German Lutherans, two for the Methodists, a large house for worship being lately finished by them, one for French Protestants, besides a meeting house for Quakers, a Roman Catholic Chapel, and a Jewish synagogue.

But little attention is paid to the public markets. A great proportion of the most wealthy inhabitants have plantations, from which they receive supplies of almost every kind of provision. The country abounds with poultry and wild ducks: their beef, mutton, and veal, are not of the best kind. Few fish are brought to market.

In 1737, it was computed that there was one thousand six hundred houses in this city, nine thousand six hundred white inhabitants, and five thousand four hundred negroes; and what evinces the healthiness of the place, upwards of two hundred of the white inhabitants were above sixty years of age. In 1791, there were sixteen thousand three hundred and fifty nine inhabitants, of whom seven thousand six hundred and eighty-four were slaves.

Charleston was incorporated in 1733, and divided into thirteen wards, which chuse as many wardens, from among whom the citizens elect an intendent of the city. The intendant and wardens form the city council, who have power to make and enforce by-laws for the regulation of the city.

BEAUFORT.

Beaufort on Port Royal island, is a pleasant little town, of about sixty or seventy houses, and two hundred and fifty inhabitants, who are distinguished for their hospitality and politeness. The courts which were formerly held here, are now held at Coosawhatchie.

GEORGE-TOWN.

This town, the seat of justice in George-town district, stands on a spot of land near the junction of a number of rivers, which, when united in one broad stream, by the name of Winyaw, fall into the ocean twelve miles below the town.

COLUMBIA.

Columbia, which has lately been made the seat of government by the legislature, stands just below the junction of Saluda and Broad rivers on the Congaree. The public officers have, however, in some instances been divided, for the accommodation of the inhabitants of the lower counties, and a branch of each retained in Charleston.

CAMDEN.

Camden, on the Wateree, north-west of Santee hills, one hundred and thirty miles north-west from Charleston, is regularly built, upon a good plan; but a small part of it is yet executed.

PURYSBURGH.

Purysburgh is a hilly village, about twenty miles above Savannah, on the north bank of the river of the same name. It was early settled by foreigners, with a view to the culture of silk, which for a while they attended to with spirit. The mulberry trees are yet standing, and some attention is still paid to the making of this article: but the profits of the rice and indigo have diverted the original planters from almost every other pursuit. Besides these, are Jacksonborough, Orangeburgh, and Cambridge, which are all inconsiderable villages of from thirty to sixty dwelling houses.

P O P U L A T I O N.

According to the census of 1791, the number of inhabitants in this State was as follows:

GEORGE-TOWN DISTRICT.

COUNTIES AND PARISHES.	Free white males of 16 years and upwards.	Free white males un- der 16 years.	Free white females.	All other free persons.	Slaves.	Total.
All Saints Parish, -	104	102	228	1	1795	2225
Prince George's do.	1345	1450	2236	80	6651	11762
Prince Frederick's do.	907	915	1596	32	4685	8135
	2256	2467	4055	113	12131	22122

CHERAWS DISTRICT.

Total, - - - -	1779	1993	3446	59	3229	10706
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CAMDEN DISTRICT.

Fairfield County, -	1335	1874	2929		1485	7623
Chester do. - - -	1446	1604	2831	47	935	6866
York do. - - - -	1350	1612	2690	29	923	6604
Richland do. - - -	596	710	1173	14	1437	3930
Clarendon do. - - -	444	516	830		602	2392
Claremont do. - - -	517	841	1080		2110	4548
Lancaster do. - - -	1253	1537	2074	68	1370	6302
	6941	8694	13607	158	8865	38265

NINETY-SIX DISTRICT.

Edgefield County, -	2332	2571	4701	65	3619	13289
Pendleton do. - - -	2007	2535	4189	3	834	9568
Spartanburgh do. - -	1808	2172	3866	27	866	8800
Abbeville do. - - -	1904	1948	3653	27	1665	9197
Lauren's do. - - - -	1969	2270	3971	7	1120	9337
Grenville do. - - -	1400	1627	2861	9	606	6503
Union do. - - - -	1500	1800	3121	48	1215	7693
Newberry do. - - -	1992	2232	3962	12	1144	9342
	14973	17165	30324	108	11060	73720

BEAUFORT DISTRICT.

COUNTIES AND PARISHES.	Free white males of 16 years and upwards.	Free white males un- der 16 years of age.	Free white females.	All other free per sons.	Slaves.	Total.
Total, - - -	1266	1055	2048	153	14236	18753

ORANGEBURGH DISTRICT.

North part, - - -	1780	169	3258	21	4529	11281
South do. - - -	1421	1478	2782	149	1402	7232
	3201	3171	6040	170	5931	18513

CHARLESTON DISTRICT.

St. Philip's Parish,	2810	1561	3718	586	7684	16359
St. Michael's do. -						
St. Bartholomew's do.	625	491	1017	133	10338	12606
St. John's, Berkley &	209	152	331	60	5170	5922
St. George's, Dor- chester, do. - }	337	311	604	25	3022	4299
St. Steven's do. -	81	45	100	1	2506	2733
St. James's, Santee, do	140	110	187	15	3345	3797
St. Thomas do. -	145	67	185	3	3403	3836
Christ Church do. -	156	138	272	11	2377	2954
St. James's, Goose Creek, do. - }	158	79	202	15	2333	2787
St. John's, Colle- ton, do. - - }	209	104	27	22	4706	5312
St Andrew's do. -	125	71	174	31	2546	2947
St. Paul's do. - -	67	48	103	17	3202	3433
	5060	3177	7165	950	50638	66081

SUMMARY OF POPULATION.

George-town district,	2350	2407	4055	113	13131	22122
Cheraws do. - -	1779	1993	3446	59	3229	10706
Camden do. - -	6941	8694	13607	158	8865	38265
Ninety-six do. -	14973	17165	30324	198	11069	73729
Beaufort do. - -	1266	1055	2048	153	14236	18753
Orangeburgh do. -	3201	3171	6040	170	5931	18513
Charleston do. - -	5060	3177	7165	950	50638	66981
	35576	37722	66680	1801	107094	249170

It would be impossible, without other data than we possess, to determine with any degree of certainty what is the present number of inhabitants in this State; but many circumstances tend to prove, that it has kept pace in point of increase with most of the other States in the Union; it cannot, therefore, at this period, contain less than three hundred thousand.

MILITARY STRENGTH.

There are between thirty and forty thousand fighting men in this State. About ten men are kept to guard Fort Johnson, on James island, at the entrance of Charleston harbour, by which no vessel can pass, unless the master or mate make oath, that there is no malignant distemper on board. The militia laws, enacting that every freeman, between sixteen and fifty years of age, shall be prepared for war, have been but indifferently obeyed since the peace. An unusual degree of military spirit however, seems lately to have arisen among the citizens of Charleston. A number of volunteer uniform companies have been lately formed in this city, besides a troop of horse, and the ancient battalion of artillery. The military ardour has been encouraged in this and several other parts of the Union by the situation of affairs in Europe.

RELIGION AND CHARACTER.

Since the revolution, by which all denominations were put on an equal footing, there have been no disputes between different religious sects. They all agree to differ on doctrinal points, and all agree in promoting the grand duties of Christianity toward God and man.

The upper parts of this State are settled chiefly by Presbyterians, Baptists and Methodists. From the most probable calculations it is supposed, that as to numbers they may be ranked as follows: Presbyterians, including the Congregational and Independent churches, Episcopalians, Baptists, Methodists, &c.

Dissolute pleasures, and luxury of every kind form a grand feature of the national character of the Carolinians. We censure not the profusion of their tables; it is the profusion of Heaven; but to the pleasures of the table they are too much addicted. Here and in every species of luxurious indulgence, they seem galloping hard after the dissolute Europeans; and small are the powers requisite to discern, that they are not very far behind them.

The Carolinians sooner arrive at maturity, both in the bodies and minds, than the natives of colder climates. They

possess a natural quickness and vivacity of genius, superior to the inhabitants of the north; but too generally want that enterprise and perseverance which are necessary for the highest attainments in the arts and sciences. They have, indeed, few motives to enterprise; inhabiting a fertile country, which, by the labour of slaves, produces plentifully and creates affluence; in a climate which favours indulgence, ease, and a disposition for convivial pleasures, they too generally rest contented with barely knowledge enough to transact the common affairs of life. There are not a few instances, however, in this State, in which genius has been united with application, and the effects of their union have been happily experienced, not only by this State, but by the whole Union.

The wealth produced by the labour of the slaves, furnishes their proprietors with the means of hospitality; and no people in the world use these means with more liberality. Some of the inhabitants spare no pains or expense in giving the highest polish of education to their children, by enabling them to travel, and by other means unattainable by those who have but moderate fortunes.

The Carolinians are generally affable and easy in their manners, and polite and attentive to strangers. The ladies want the bloom of the north, but have an engaging softness and delicacy in their appearance and manners, and many of them possess the polite and elegant accomplishments.

Hunting is the most fashionable amusement in this State; at this the country gentlemen are extremely expert, and with surprising dexterity pursue their game through the woods. Gaming of all kinds is more discountenanced among fashionable people, in this than in any of the southern States. Twice a year, statedly however, a class of sportive gentlemen in this and the neighbouring States, have their horse-races. Bets of ten or fifteen hundred guineas have been sometimes laid on these occasions.

Bacchus is much respected in this country, and no objection can be made to the sway of so mirth inspiring a friend, when limited by prudence and moderation. But as that seldom happens, the objections against this custom become serious and weighty: it is a species of luxury the most dangerous, because leading directly to all others; but it is a species for which the Carolinians are most excusable. Without the assistance of wine, in all warm climates, the mind is enervate, the spirits become languid, and the imagination barren. It is known to all physicians, that

wine, by its tonic quality, obviates debility induced by climate ; and that the effects of putrid miasmata are destroyed by its antiseptic power. Hence the use of wine, in warm and sickly climates, becomes obvious ; and hence a cause arises, why the inhabitants of those climates are so generally addicted to the bottle.

With the introduction of luxury in this country, the power of religion has visibly declined amongst all the different denominations of Christians ; but if the Carolinians are not religious, it may be truly said, they are not superstitious. Theatrical amusements have been introduced and encouraged among them. These, though they form a species of refined luxury, are, of many others the least dangerous ; their political damage, at least is not so great ; for while they add a polish to the manners of the people, they seldom impoverish the country : actors are generally profuse in living ; they seldom deprive a country of its cash : hence money in their hands is not lost ; quite the reverse, it is put in circulation.

In countries where slavery is encouraged, the ideas of the people are, in general, of a peculiar cast ; the soul often becomes dark and narrow, and assumes a tone of savage brutality. Such at this day are the inhabitants of Barbary and the West-Indies. But, thank God ! nothing like this has yet disgraced an American State. We may look for it in Carolina, but we shall be disappointed. The most elevated and liberal Carolinians abhor slavery ; they will not debase themselves by attempting to vindicate it ; he who would encourage it, abstracted from the idea of bare necessity, is not a man, he is a brute in human form. For *"disguise thyself as thou wilt, O slavery, still thou art a bitter draught ;"* it is interest, louder than the voice of reason, which alone exclaims in thy favour.

Among their neighbours, the Carolinians stand accused of haughtiness and insolent carriage. Nothing is apparently more true than this charge ; nothing is really more false. Surrounded by slaves, and accustomed to command, they acquire a forward, dictatorial habit, which can never be laid aside. In order to judge of their dispositions, we must study them with attention. Genuine affability, and generosity, form their distinguishing characteristics ; for these, for the exercise of hospitality, and all the social virtues, we may venture to assert, that no country on earth has excelled Carolina.

There is no instance, perhaps, in which the richer class of people trespass more on the rules of propriety than in the mode of conducting their funerals. That a decent respect should be

paid to the dead, is the natural dictate of refined humanity; but this is not done by sumptuous and expensive entertainments, splendid decorations, and pompous ceremonies, which a misguided fashion has introduced and rendered necessary in this State. Wine, punch, and all kinds of liquors, tea, coffee, cake, &c. in profusion, are handed round on these solemn occasions. In short, the Scripture observation, "*It is better to go to the house of mourning than to the house of feasting,*" is unintelligible and wholly inapplicable here, as it is difficult to distinguish the house of mourning from the house of feasting.

TRADE AND MANUFACTURES.

In the middle, and especially in the upper country, the people are obliged to manufacture their own cotton and woollen cloths, and most of their husbandry tools: but in the lower country the inhabitants, for these articles depend almost entirely on their merchants. Late accounts from the interior parts of this State inform us, that the inhabitants manufacture, entirely in the family way, as much as they have occasion for; that cotton hemp and flax are plenty; that they have a considerable stock of good sheep; that great exertions are made, and much done in the household way; that they have long been in the habit of doing something in family manufactures, but within a few years past great improvements have been made. The women do the weaving, and leave the men to attend to agriculture.

This State furnishes all the materials, and of the best kind, for ship building. The live oak, and the pitch and yellow pines, are of a superior quality. Ships might be built here with more ease, and to much greater advantage, than in the middle and eastern States. A want of seamen is one reason why this business is not more generally attended to.

So much attention is now paid to the manufacture of indigo in this State, that it bids fair to rival that of the French. It is to be regretted, that it is still the practice of the merchants concerned in the Carolina trade, to sell, at foreign markets, the Carolina indigo, of the first quality, as French. This country, while it increases the immediate profit of the merchant, sinks the character of the Carolina article; and in one view almost necessitates the trader to continue a practice begun in folly and knavery.

There has been a vast consumption of foreign imported articles; but the quantities and value of their exports generally leave a balance in favour of the State.

The amount of exports from the port of Charleston, in the year ending November, 1787, was then estimated, from authentic documents, at five hundred and five thousand two hundred and seventy-nine pounds, nineteen shillings and five pence, sterling money. The number of vessels cleared from the custom house the same year was nine hundred and forty-seven, measuring sixty-two thousand one hundred and eighteen tons: seven hundred and thirty-five of these, measuring forty-one thousand five hundred and thirty one tons, were American; the others belonged to Great-Britain, Spain, France, the United Netherlands and Ireland.

The principal articles exported from this State are, rice, indigo, tobacco, skins of various kinds, beef, pork, cotton, pitch, tar, rosin, turpentine, myrtle-wax, lumber, naval stores, cork, leather, pink root, snake root, ginseng, &c. In the most successful seasons, there have been as many as one hundred and forty thousand barrels of rice, and one million three hundred thousand pounds of indigo exported in a year. From the 15th of December, 1791, to September, 1792, one hundred and eight thousand five hundred and sixty-seven tierces of rice, averaging five hundred and fifty pounds nett weight each, were exported from Charleston. In the year ending September 30th, 1791, exclusive of two quarters, for which no returns were made, the amount of exports from this State was one million and eight hundred and sixty-six thousand and twenty-one dollars.

There is in this State, besides a branch of the national bank, a bank, by the name of the South-Carolina bank, which was established in 1792, in Charleston.

STATE OF LITERATURE.

Gentlemen of fortune, before the late war, sent their sons to Europe for education. During the late war and since, they have generally sent them to the middle and northern States. Those who have been at this expense in educating their sons, have been but comparatively few in number, so that the literature of the State is at a low ebb. Since the peace, however, it has begun to flourish. There are several respectable academies at Charleston; one at Beaufort, on Port Royal island; and several others in different parts of the State. Three colleges have lately been incorporated by law; one at Charleston, one at Winnsborough, in the district of Camden, and the other at Cambridge, in the district of Ninety-six. The public and private donations for

the support of these three colleges were originally intended to have been appropriated jointly, for the erecting and supporting of one respectable college. The division of these donations has frustrated this design. Part of the old barracks in Charleston has been handsomely fitted up, and converted into a college, and there are a number of students: but it does not yet merit a more dignified name than that of a respectable academy. The Mount Sion college, at Winnsborough, is supported by a respectable society of gentlemen, who have long been incorporated. This institution flourishes, and bids fair for usefulness. The college at Cambridge is no more than a grammar-school. To put the literature of this State upon a respectable footing, nothing is wanting but a spirit of enterprise among its wealthy inhabitants.

CHARITABLE AND OTHER SOCIETIES.

These are the South-Carolina, Mount Sion Library, and St. Cecilia societies; a society for the relief of the widows and orphans of clergymen, a medical society lately instituted in Charleston, and a musical society. At Beaufort and on St. Helena are several charitable societies, incorporated with funds to a considerable amount, designed principally for the education of poor children, and which promise, at a future day, to be of great public utility. What are called Jockey Clubs have increased within a few years.

PUBLIC REVENUE AND EXPENSES.

The public revenue of this State is, nominally, ninety thousand pounds sterling; but a great part of this is either not collected, or paid in securities, which are much depreciated. The expenses of government are about sixteen thousand pounds sterling per annum.

The great bulk of the revenue of the State is raised by a tax on lands and negroes. The lands, for the purpose of being taxed according to their value, are divided into three grand divisions; the first reaches from the sea-coast to the extent of the flowing of the tides; the second, from these points to the fall of the rivers; and from thence to the utmost verge of the western settlement makes the third. These grand divisions, for the sake of more exactly ascertaining the value of the lands, are subdivided into twenty-one different species: the most valuable of which is estimated at six pounds, and the least valuable at one shilling per acre. One per cent. on the value

thus estimated is levied from all granted lands in the State. The collection of taxes is not annexed to the office of sheriff, but is committed to particular gentlemen appointed for that purpose who are allowed two and a half per cent, in Charleston, and five per cent, in the other parts of the State, on all they collect.

CONSTITUTION.

The legislative authority is vested in a General Assembly, consisting of a Senate and House of Representatives. There are one hundred and twenty-four Representatives, and thirty five senators appointed among the several districts. The representatives are chosen for two years, must be free white men, twenty-one years old, and have been inhabitants of the State three years. If resident in the district, they must have a freehold of five hundred acres of land, and ten negroes or real estate worth one hundred and fifty pounds sterling, clear of debt; if non-resident, must have a freehold in the district worth five hundred pounds sterling clear of debt. The senators are chosen for four years, and divided into two classes, one class being chosen every second year. They must be free white men, thirty years old, and have been inhabitants five years. If resident in the district, they must have a freehold worth three hundred pounds sterling, clear of debt; if non-resident, a freehold worth one thousand pounds sterling, clear of debt. Every free white man, twenty-one years old, having been an inhabitant of the State two years, and been a freeholder of fifty acres of land or a town lot, six months, or having been resident in the district six months, and paid a tax of three shillings sterling, has a right to vote for members of the legislature. The General Assembly is chosen on the second Monday in October, and meets on the fourth Monday in November annually. Each house chooses its own officers, judges of the qualifications of its members, and has a negative on the other. A majority of each make a quorum from day to day, and compel the attendance of members. They are protected, in their persons and estates, during the sessions, and ten days before and after; except in cases of treason, felony, and breach of the peace. They are paid out of the public treasury from which no money is drawn but by the legislative authority. Revenue bills originate in the lower house, but may be altered or rejected by the senate. Army and navy contractors, and all officers, excepting officers in the militia, justices of the peace, and justices of the county courts which have no salaries, are excluded from the General Assembly. The clergy are excluded from civil offices. The executive authority is vested in a governor,

chosen for two years, by both houses of Assembly jointly; but he cannot be re-elected till after four years. He must be thirty years old, have been an inhabitant of the State ten years, and have an estate in it worth one thousand five hundred pounds sterling, clear of debt. He can hold no other office except in the militia. A lieutenant-governor is chosen in the same manner, for the same time, and possessing the same qualifications; and holds the office of governor in case of vacancy. The governor is commander in chief of the military force; has power to remit fines and forfeitures, and grant reprieves and pardons, except in cases of impeachment: to require information of executive officers; to convene the General Assembly on extraordinary occasions, and to adjourn them to any time not beyond the fourth Monday in November next ensuing, in case they cannot agree on the time themselves. He must inform the General Assembly of the condition of the State; recommended such measures as he shall judge expedient; and take care that the laws are faithfully executed in mercy. The legislature has power to vest the judicial authority in such courts as it shall think proper. The judges hold their commission during good behaviour; those of the superior courts are elected by joint ballot of both houses of Assembly; have a stated salary, and can hold no other office. All officers take and an oath of fidelity to their duty, and to the constitution of this State, and of the United States; and for malconduct, may be impeached by the House of Representatives, and tried by the Senate. This constitution asserts the supreme power of the people; liberty of conscience; trial by jury; and subordination of the military to the civil power. It excludes *ex post facto* laws; bills of attainder; excessive bail; and titles of nobility and hereditary distinction.

The legislature has power, under certain regulations, to make amendments to the constitution. And a convention may be called by a vote of two-thirds of both branches of the whole representation.

This constitution was ratified June 3d, 1790.

L A W S.

The laws of this State have nothing in them of a particular nature excepting what arises from the permission of slavery. The evidence of a slave cannot be taken against a white man; and the master who kills his slave is not punishable otherwise than by a pecuniary mulct, and twelve months imprisonment*.

* We are not absolutely certain, that these unjust distinctions have not since been done away. *Editor*

A commintee was appointed, at the session of the legislature in 1792, to put in train the business of revising and amending the negro act, or the law for governing the slaves. The issue has meliorated the condition of the slaves, and afforded an evidence to the world of the enlightened policy, and increasing humanity of the citizens of this State. Prior to this a disposition to soften the rigors of slavery was manifested, by allowing them fish, tobacco, and summer clothing, which formerly was not customary. Thus while a vestige of slavery remains the situation of the slaves is rendered tolerable, and no doubt can be entertained but that farther steps will be taken to prepare their minds for the enjoyment of that freedom which the federal government has acknowledged to be their right, and which they have paved the way for their obtaining.

A law, altering the mode of descent of intestate estates, which formerly descended according to the laws of England, was passed in 1792. According to the present law, a more equal partition takes place, and more conformable to a republican government, to the dictates of natural affection, and the principles of common sense.

By a late regulation, the judges of the court, who before had a salary of five hundred pounds each, and fees, have now six hundred pounds and no fees. The chief justice has eight hundred pounds.

PRACTICE OF LAW, COURTS, &c.

From the first settlement of this country in 1669, to the year 1769, a single court, called the court of common pleas, was thought sufficient to transact the judicial business of the State. This court was invariably held at Charleston, where all the records were kept, and all civil business transacted. As the province increased, inconveniencies arose, and created uneasiness among the people.

To remedy these inconveniencies an act was passed in 1769, by which the province was divided into seven districts, which have been mentioned. The court of common pleas, invested with the powers of the same court in England, sat four times a year in Charleston. By the above-mentioned act, the judges of the court of common pleas were empowered to sit as judges of the court of sessions, invested with the powers of the court of king's bench in England, in the criminal jurisdiction. The act likewise directed the judges of the courts of common pleas and sessions in Charleston district, to divide, and two of the judges to proceed on what is called the northern circuit, and the other two on the southern

circuit, distributing justice in their progress. This mode of administering justice continued till 1785, when, by the unanimous exertions of the two upper districts, an act was passed, establishing county courts in all the counties of the four districts of Camden, Ninety-Six, Cheraws, and Orangeburgh. The county courts are empowered to sit four times a year. Before the establishment of county courts, the lawyers all resided at Charleston, under the immediate eye of government; and the Carolina bar was as pure as any in the United States. Since this establishment, lawyers have flocked in from all quarters, and settled in different parts of the country, and law-suits in consequence have been multiplied beyond all former knowledge.

DAMAGE BY THE LATE WAR.

The damages which this State sustained in the late war are thus estimated: the three entire crops of 1779, 1780, and 1781, all of which were used by the British; the crop of 1782, taken by the Americans; about twenty-five thousand negroes; many thousand pounds worth of plate, and household furniture in abundance; the villages of George-town and Camden burnt; the loss to the citizens directly by the plunderings and devastations of the British army, and indirectly by American impressments, and by the depreciation of the paper currency, together with the heavy debt of one million, two hundred thousand pounds sterling, incurred for the support of the war, in one aggregate view, make the price of independence to South-Carolina, exclusive of the blood of its citizens, upwards of three million pounds sterling.

INDIANS.

The Catabaws are the only nation of Indians in this State. They have but one town, called Catabaw, situated on Catabaw river, in latitude $34^{\circ} 49'$, on the boundary line between North and South Carolinas, and contains about four hundred and fifty inhabitants, of which about one hundred and fifty are fighting men.

It is worthy of remark, that this nation was long at war with the six nations, into whose country they often penetrated, which it is said no other Indian nation from the south or west ever did. The six nations always considered them as the bravest of their enemies, till they were surrounded by the settlements of white people, whose neighbourhood, with other concurrent causes, have rendered them corrupt and enervated.

STATE OF GEORGIA.

SITUATION, EXTENT, AND BOUNDARIES.

THIS State is situated between 31° and 35° north latitude and 5° and 16° west longitude : its length is six hundred miles, and its breadth two hundred and fifty. It is bounded on the east, by the Atlantic ocean ; on the south, by East and West Florida ; on the west, by the river Mississippi ; and on the north and north-east, by South-Carolina, and the lands ceded to the United States by North-Carolina, or the Tennessee government.

CLIMATE, &c.

In some parts of this State, at particular seasons of the year, the climate cannot be esteemed salubrious. In the low country near the rice swamps, bilious complaints, and fevers of various kinds, are pretty universal during the months of July, August and September, which for this reason, are called the sickly months.

The disorders peculiar to this climate originate partly from the badness of the water, which in the low country, except in and about Savannah, and some other places, where good springs are found, is generally brackish, and partly from the noxious putrid vapours which are exhaled from the stagnant waters in the rice swamps. Besides, the long continuance of warm weather produces a general relaxation of the nervous system, and as a great proportion of the inhabitants have no necessary labour to call them to exercise, a large share of indolence is the natural consequence ; and indolence, especially amongst a luxurious people, is ever the parent of disease. The immense quantities of spirituous liquors which are used to correct the brackishness of the water, form a species of intemperance, which too often proves ruinous to the constitution. Parents of infirm, sickly habits, often, in more senses than one, have children of their own

likeness. A considerable part of the diseases of the present inhabitants may, therefore, be considered as hereditary.

Before the sickly season commences, many of the rich planters remove with their families to the sea islands, or some elevated healthy situation, where they reside three or four months for the benefit of the fresh air. In the winter and spring, pleurisies, peripneumonies, and other inflamitory disorders, occasioned by sudden and violent colds, are generally common and frequently fatal. Consumptions, epilepsies, cancers, palsies and apoplexies, are not so common among the inhabitants of the southern as northern climates.

The winters in Georgia are very mild and pleasant. Snow is seldom or never seen. Vegetation is not frequently prevented by severe frosts. Cattle subsist well through the winter, without any other food than what they obtain in the woods and savannahs and are fatter in that than in any other. In the hilly country, which begins about fifty, and in some places one hundred miles from the sea, the air is pure and salubrious, and the water plenty and good. From June to September, the mercury in Fahrenheit's thermometer commonly fluctuates from 76° to 90° ; in winter, from 40° to 60° . The most prevailing winds are south-west and east; in winter north-west. The east wind is warmest in winter, and coolest in summer. The south wind, in the summer and fall particularly, is damp, sultry, unelastic, and of course, unhealthy.

In the South-east parts of this State, which lie within a few degrees of the torrid zone, the atmosphere is kept in motion by impressions from the trade winds. This serves to purify the air, and render it fit for respiration; so that it is found to have a very advantageous effect on persons of consumptive habits.

FACE OF THE COUNTRY.

The eastern part of the State, between the mountains and the ocean, and the rivers Savannah and St. Mary's, a tract of country, more than one hundred and twenty miles from north to south, and forty or fifty from east to west, is entirely level, without a hill or stone. At the distance of about forty or fifty miles from the sea-board, or salt-marsh, the lands begin to be more or less uneven. The ridges gradually rise one above another into hills, and the hills successively increasing in height, till they finally terminate in mountains. That vast chain of mountains which commences with the Katt's Kill, near Hudson river in the State of New-York, known by the names of the

Allegany and Appalachian mountains, terminate in this State, about sixty miles south of its northern boundary. From the foot of this mountain spreads a wide-extended plain, of the richest soil, and in a latitude and climate well adapted to the cultivation of most of the East-India productions.

The rivers in this State are numerous; and some of them of the utmost importance.

Savannah river divides this State from South-Carolina: its course is nearly from north-west to south-east. It is formed principally of two branches; known by the names of Tugulo and Keowee, which spring from the mountains, and unite fifteen miles north-west of the northern boundary of Wilkes county. It is navigable for large vessels up to Savannah, and for boats of one hundred feet keel as far as Augusta. After rising a fall just above this place, it is passable for boats to the mouth of Tugulo river. After it takes the name of Savannah, at the confluence of the Tugulo and Keowee, it receives a number of tributary streams from the Georgia side, the principal of which is Broad river, which rises in the county of Franklin, and runs south-east through part of Wilkes county, and mingles with the Savannah at the town of Petersburg and might, with a trifling expense, be made boatable twenty-five or thirty miles through the best settlements in Wilkes county. Tybee bar, at the entrance of Savannah river, in latitude $31^{\circ} 57'$, has sixteen feet water at half tide.

Ogeechee river, about eighteen miles south of the Savannah, is a smaller river, and nearly parallel with it in its course.

Alatamaha,* about sixty miles south of Savannah river, has its source in the Cherokee mountains, near the head of the Tugulo, the great west branch of Savannah, and, before it leaves the mountains, is joined and augmented by innumerable rivulets; thence it descends through the hilly country, with all its collateral branches, and winds rapidly amongst hills two hundred and fifty miles, and then enters the flat, plain country, by the name of the Ockmulgee; thence meandering one hundred and fifty miles, it is joined on the east side by the Ocone, which likewise heads in the lower ridges of mountains. After this confluence, having now gained a vast acquisition of waters, it assumes the name of Alatamaha, when it becomes a large majestic river, flowing with gentle windings through a vast forest, near one hundred miles,

* Pronounced Oltamawhaw.

and enters the Atlantic by several mouths. The north channel, or entrance, glides by the heights of Darien, on the east bank, about ten miles above the bar, and, running from thence with several turnings, enters the ocean between Sapello and Wolf islands. The south channel, which is esteemed the largest and deepest, after its separation from the north, descends gently, winding by M'Intosh's and Broughton Islands; and lastly, by the west coast of St. Simon's island, enters the ocean, through St. Simon's sound, between the south end of the island of that name, and the north end of Jekyl island. On the west banks of the south channel, ten or twelve miles above its mouth, and nearly opposite Darien, are to be seen the remains of an ancient fort or fortification; it is now a regular tetragon terrace, about four feet high, with bastions at each angle; the area may contain about an acre of ground, but the fosse which surrounded it is nearly filled up. There are large live oaks, pines and other trees growing upon it, and in the old fields adjoining. It is supposed to have been the work of the French or Spaniards. A large swamp lies betwixt it and the river, and a considerable creek runs close by the works, and enters the river through the swamp, a small distance above Broughton island. About seventy or eighty miles above the confluence of the Oakmulge and Ocone, the trading path from Augusta to the Creek nation crosses these fine rivers, which are there forty miles apart. On the east banks of the Oakmulge, this trading road runs nearly two miles through ancient Indian fields, which are called the Oakmulge fields; they are the rich low lands of the river. On the heights of these low grounds are yet visible monuments or traces, of an ancient town, such as artificial mounts or terraces, squares and banks, encircling considerable areas. Their old fields and planting land extend up and down the river, fifteen or twenty miles from this site. And, if we are to give credit to the account the Creeks give of themselves, this place is remarkable for being the first town or settlement, when they sat down, as they term it, or established themselves after their emigration from the west, beyond the Mississippi, their original native country.

Besides these, there is Turtle river, Little Sitilla, or St. Ille, Great Sitilla, Crooked river, and St. Mary's, which form a part of the southern boundry of the United States. St. Mary's river has its source from a vast lake, or rather marsh, called Ouaquaphenogaw, and flows through a vast plain and pine forest, about one hundred and fifty miles to the ocean, with which it

communicates between the points of Amelia and Talbert's islands, latitude $30^{\circ} 44'$, and is navigable for vessels of considerable burthen for ninety miles. Its banks afford immense quantities of fine timber, suited to the West-India market. Along this river, every four or five miles, are bluffs convenient for vessels to haul to and to load.

The rivers in the middle and western parts of this State, are, Apalachicola, which is formed by the Chatahouchee and Flint rivers, Mobile, Pascagoula and Pearl rivers. All these running southwardly, empty into the Gulph of Mexico. The forementioned rivers abound with a great variety of fish, among which are the mullet, whiting, sheephead, cat, rock, trout, drum, bass, brim, white, shad, and sturgeon. The bays and lagoons are stored with oysters and other shell fish, crabs, shrimps, &c. The clams, in particular, are large, their meat white, tender and delicate. The shark and great black stingray are insatiable cannibals, and very troublesome to the fishermen.

The lake, or rather marsh, called Ouaquaphenogaw, lies between Flint and Oakmulge rivers, and is nearly three hundred miles in circumference. In wet seasons it appears like an inland sea, and has several large islands of rich land; one of which the present generation of Creek Indians represent as the most blissful spot on earth. They say it is inhabited by a peculiar race of Indians, whose women are incomparably beautiful. They tell you also that this terrestrial paradise has been seen by some enterprising hunters, when in pursuit of their game, who, being lost in inextricable swamps and bogs, and on the point of perishing, were unexpectedly relieved by a company of beautiful women, whom they call daughters of the Sun, who kindly gave them such provisions as they had with them, consisting of fruit and corn cakes, and then enjoined them to fly for safety to their own country, because their husbands were fierce men and cruel to strangers. They farther say, that these hunters had a view of their settlements, situated on the elevated banks of an island, in a beautiful lake; but that in their endeavours to approach it, they were involved in perpetual labyrinths, and, like enchanted land, still as they imagined they had just gained it, it seemed to fly before them. They determined, at length, to quit the delusive pursuit, and with much difficulty effected a retreat. When they reported their adventures to their countrymen, the young warriors were inflamed with an irresistible desire to invade and conquer so charming a country, but all their attempts had hitherto

proved fruitless, they never being able again to find the spot. They tell another story concerning this sequestered country, which seems not improbable, which is, that the inhabitants are the posterity of a fugitive remnant of the ancient Yamases, who escaped massacre after a bloody and decisive battle between them and the Creeks. It is certain, that the Creeks conquered and nearly exterminated that once powerful people, and it is probable, that they here found an asylum, remote and secure from the fury of their proud conquerors.

Besides the St. Mary; the rivers Sitilla, or St. Ille, and the beautiful Little St. Juan, which empties into the bay of Appalachicola at St. Mark's, are said to flow from this lake.*

About sixteen miles from the mouth of Broad river, on its south side, is what is called the Goosepond, a tract of about one hundred and eighty acres, covered with living water about two feet deep: it discharges into the river, and is fed by two springs.

SOIL, PRODUCTIONS, &c.

The soil in this State and its fertility are various, according to situation and different improvement. The islands on the sea board, in their natural state, are covered with a plentiful growth of pine, oak and hiccory, live oak, an uncommonly hard and a very valuable wood, and some red cedar. The soil is a mixture of sand and black mould, making what is commonly called a grey soil. A considerable part of it, particularly that whereon grow the oak, hiccory and live oak, is very rich, and yields, on cultivation, good crops of indigo, cotton, corn and potatoes. These islands are surrounded by navigable creeks, between which and the main land is a large extent of salt marsh, fronting the whole State, not less, on an average, than four or five miles in breadth, intersected with creeks in various directions, admitting, through the whole, an inland navigation between the islands and main land, from the north-east to the south-east corners of the State. The east sides of these islands are, for the most part, clean, hard, sandy beaches, exposed to the wash of the ocean. Between these islands are the entrances of the rivers from the interior country, winding through the low salt marshes, and delivering their waters into the sounds, which form capacious harbours of from three to eight miles over, and which communicate with each other by parallel salt creeks.

* Bartram's Travels.

The principal islands are, Shidaway, Waffaw, Offabaw, St. Catharine's, Sapelo, Frederica, Jekyl, Cumberland and Amelia.

The soil of the main land, adjoining the marshes and creeks is nearly of the same quality with that of the islands, except that which borders on those rivers and creeks which stretch far back into the country. On these, immediately after you leave the salts, begin the valuable rice swamps, which, on cultivation, afford the present principal staple of commerce. Most of the rice lands lie on rivers, which as far as the tide flows, are called tide lands; or on creeks and particular branches of water, flowing in some deeper or lower parts of the lands, which are called inland swamps, and extend back in the country from fifteen to twenty-five miles, beyond which very little rice is planted, though it will grow exceedingly well, as experiment has proved, one hundred and twenty miles back from the sea. The intermediate lands, between these creeks and rivers, are of an inferior quality, being of a grey soil, covered chiefly with pine, and a sort of wild grass and small reeds, which afford a large range of feeding ground for stock both summer and winter. Here and there are interspersed oak and hickory ridges, which are of a better soil, and produce good crops of corn and indigo; but these are very little elevated above the circumjacent lands. The lands adjoining the rivers, and, for an hundred miles in a direct line from the sea, continue a breadth from two to three or four miles, and wherever, in that distance, you find a piece of high land that extends to the bank of the river on one side, you may expect to find the low or swamp ground proportionably wide on the opposite side of the river. This seems to be an invariable rule till you come to that part where the river cuts the mountains.

The soil between the rivers, after you leave the sea board and the edge of the swamps, at the distance of twenty or thirty miles, changes from a grey to a red colour, on which grows plenty of oak and hickory, with a considerable intermixture of pine. In some places it is gravelly, but fertile, and so continues for a number of miles, gradually deepening the reddish colour of the earth, till it changes into what is called the Mulatto soil, consisting of a black mould and red earth. The composition is darker or lighter according as there is a larger or smaller proportion of the black or red earth in it. The mulatto lands are generally strong, and yield large crops of wheat, tobacco, corn, &c. To this kind of land succeeds by turns a soil nearly black and very rich, on which grow large

quantities of black walnut, mulberry, &c. This succession of different soils continues uniform and regular, though there are some large veins of all the different soils intermixed; and what is more remarkable, this succession, in the order mentioned, stretches across this State nearly parallel with the sea coast, and extends through the several States nearly in the same direction, to the banks of Hudson river. In this State are produced, by culture, rice, indigo, cotton, silk, (though not in large quantities) Indian corn, potatoes, oranges, figs, pomegranates, &c. Rice, at present, is the staple commodity; and as a small proportion only of the rice ground is under cultivation, the quantity raised in future must be much greater than at present. But the rapid increase of the inhabitants, chiefly by emigrations, whose attention is turned to the raising of tobacco, and the vast extent of land, with a richness of soil suited to the culture of that plant, renders it probable, that tobacco will shortly become the staple of this State. Cotton was formerly planted only by the poorer class of people, and that only for family use. They planted of two kinds, the annual and the West-Indian; the former is low and planted every year; the balls of which are very large, and the phlox long, strong, and perfectly white. The latter is a tall perennial plant, the stalk somewhat shrubby, several of which rise up from the root for several years successively, the stems of the former year being killed by the winter frosts. The balls of West-India cotton are not quite so large as the other, but the phlox or wool is long, extremely fine, silky and white. A plantation of this kind will last several years with moderate labour and care. The culture of cotton is now much more attended to; several indigo planters have converted their plantations into cotton fields. The tobacco lands are equally well adapted to wheat, which may hereafter make an important article of commerce.

On the dry plains grow large crops of sweet potatoes, which are found to afford a wholesome nourishment, and from which is made by distillation, a kind of whisky, tolerably good, but inferior to that made of rye. It is by properly macerating and washing this root that a sediment or starch is made, which has obtained the name of sago, and answers all the purposes of the Indian sago.

Most of the tropical fruits would flourish in this State with proper attention. The rice plant has been transplanted, and also the tea plant, of which such immense quantities are consumed in the United States, was introduced into Georgia by

Mr. Samuel Bowen, about the year 1770, from India. The seed was disseminated, and the plant now grows, without cultivation, in most of the fenced lots in Savannah.

From many considerations we may, perhaps, venture to predict, that the south-western part of the State, and the parts of East and West-Florida, which lie adjoining, will, in some future time, become the vineyard of America.

REMARKABLE SPRING.

In the county of Wilkes, within a mile and a half of the town of Washington, is a medicinal spring, which rises from a hollow tree, four or five feet in length. The inside of the tree is covered with a coat of matter, an inch thick, and the leaves around the spring are incrusted with a substance as white as snow. It is said to be a sovereign remedy for the scurvy, scrophulous disorders, consumptions, gouts, and every other disease arising from humours in the blood. A person, who had a severe rheumatism in his right arm, having, in the space of ten minutes, drank two quarts of the water, experienced a momentary chill, and was then thrown into a perspiration, which, in a few hours, left him entirely free from pain, and in perfect health.

This spring, situated in a fine healthy part of the State, in the neighbourhood of Washington, where are excellent accommodations, will no doubt prove a pleasant and salutary place of resort for invalids from the maritime and unhealthy parts of this and the neighbouring States.

CIVIL DIVISIONS.

Before the revolution, Georgia, like the other southern States, was divided into parishes, but this mode of division is now abolished, and that of counties has succeeded it.

That part of the State which is laid out, is divided into three districts, which are subdivided into eleven counties, as follows:

LOWER DISTRICT.

Camden,
Glyn,

Liberty,
Chatham,

Effingham,

MIDDLE DISTRICT.

Richmond,

Burke,

Washington.

UPPER DISTRICT.

Wilkes,

Franklin,

Green.

C H I E F T O W N S.

The chief towns are, St. Patrick's, Brunswick, Sunbury, Savannah, Ebenezer, Augusta, Waynesborough, Louisville, Golphinton, Washington, Greensburgh.

AUGUSTA.

The present seat of government in this State is Augusta. It is situated on the south-west bank of Savannah river, which is here about five hundred yards wide, about one hundred and forty-four miles from the sea, and one hundred and twenty-seven north-west of Savannah. The town, which in 1782 contained but three or four houses, in 1787 contained two hundred; it is on a fine large plain, at the foot of the first falls in the river, which in a dry season are four or five feet in height; and as it enjoys the best soil, and the advantage of a central situation between the upper and lower counties, is rising fast into importance. In the vicinity of this town is the remarkable large bank of oyster shells which we have had occasion before to notice.

SAVANNAH.

Savannah, the former capital of Georgia, stands on a high sandy bluff, on the south side of the river of the same name, and seventeen miles from its mouth. The town is regularly built in the form of a parallelogram, and, including its suburbs, contained, in 1787, two hundred and twenty-seven dwelling houses, one Episcopal church, a Presbyterian church, a Synagogue, and a court house. The number of its inhabitants, exclusive of the blacks, amounted at that time to about eight hundred and thirty, seventy of whom were Jews.

In Savannah, and within a circumference of about ten miles from it, there were, in the summer of 1787, about two thousand three hundred inhabitants. Of these one hundred and ninety-two were above fifty years of age, and all in good health. The ages of a lady and her six children, then living in the town, amounted to three hundred and eighty-five years.

This computation, which was actually made, serves to shew that Savannah is not really so unhealthy as has been commonly represented.

SUNBURY.

Sunbury is a sea port town, beautifully situated on the main between Medway and Newport rivers, about fifteen miles south of Great Ogeechee river; it is favoured with a safe, capacious, and very convenient harbour, defended from the fury of the seas by the north and south points of St. Helena, and South Catherine's islands, between which is the bar and entrance into the sound. Several small islands intervene, and partly obstruct a distant view of the ocean; and, interlocking with each other, render the passage out to sea winding, but not difficult. It is a very pleasant, healthy town, and is the resort of the planters from the adjacent places of Medway and Newport, during the sickly months. It was burnt by the British in the late war, but has since been rebuilt. An academy was established here in 1788, which, under an able instructor, has proved a very useful institution.

BRUNSWICK.

Brunswick, in Glyn county, latitude $31^{\circ} 10'$, is situated at the mouth of Turtle river, at which place this river empties itself into St. Simon's sound. Brunswick has a safe and capacious harbour; and the bar, at the entrance into it, has water deep enough for the largest vessels that swim. The town is regularly laid out, but not yet built. From its advantageous situation, and from the fertility of the back country, it promises to be hereafter one of the first trading towns in Georgia.

FREDERICA.

Frederica, on the island of St. Simon, is nearly in latitude $31^{\circ} 15'$; it is one of the oldest towns in Georgia, and was founded by General Oglethorpe. The fortress was regular and beautiful, constructed chiefly with brick, but is now in ruins. The town contains but few houses, which stand on an eminence, if considered with regard to the marshes before it, upon a branch of Alatamaha river, which washes the west side of this agreeable island, and forms a bay before the town, affording a safe and secure harbour for vessels of the largest burthens, which may lie along the wharf.

WASHINGTON.

Washington, the chief town in the county of Wilts, is situated in latitude $33^{\circ} 22'$, about fifty miles north-west of Augusta; it had, in 1788, a court house, goal, thirty-four dwelling houses, and an academy, whose funds amounted to about eight hundred pounds sterling, and the number of students to between sixty and seventy.

LOUISVILLE.

The town of Louisville, which is designed as the future seat of government in this State, has been laid out on the bank of Ogeechee river, about seventy miles from its mouth, but is not yet built.

P O P U L A T I O N.

The population of this State in 1791 was as follows:

LOWER DISTRICT.

COUNTIES.	Free white males of 16 years and upwards.	Free white males under 16 years of age.	Free white females.	All other free persons.	Slaves.	Total.
Camden, - - - -	81	44	96	14	70	305
Glyn, - - - - -	70	36	87	5	215	413
Liberty, - - - -	426	264	613	27	4025	5355
Chatham, - - - -	816	480	1130	112	8201	16739
Effingham, - - -	627	336	711		750	2424
	2020	1160	2637	158	13261	21536

MIDDLE DISTRICT.

Richmond - - - -	1894	1925	3343	39	4116	11317
Burke, - - - - -	1808	1841	3415	11	2392	9467
Washington, - - -	947	1024	1885	2	694	4552
	4649	4790	8643	52	7202	25336

UPPER DISTRICT.

COUNTIES.	Free white males of 16 years and upwards.	Free white males under 16 years of age.	Free white females.	All other free per sons.	Slaves.	Total.
Wilkes, - - - -	5152	6740	12160	180	7268	31500
Franklin, - - - -	225	243	417		156	1041
Greene, - - - -	1027	1111	1882	8	1377	5405
	6404	8094	14459	188	8801	37946

SUMMARY OF POPULATION.

Lower District, - -	2020	1160	2637	158	13261	21536
Middle do. - - -	4649	4790	8643	52	7202	25336
Upper do. - - -	6404	8094	14459	188	8801	37946
	13073	14044	25739	398	29264	84818

RELIGION AND CHARACTER.

The inhabitants of this State, who profess the Christian religion, are of the Presbyterian, Episcopalian, Baptist, and Methodist denominations. They have but a few regular ministers among them.

No general character will apply to the inhabitants at large. Collected from different parts of the world, as interest, necessity, or inclination led them, their character and manners must, of course, partake of all the varieties which distinguish the several states and kingdoms from whence they came. Their is so little uniformity, that it is difficult to trace any governing principles among them. An aversion to labour is too predominant, owing in part to the relaxing heat of the climate, and partly to the want of necessity to excite industry. An open and friendly hospitality, particularly to strangers, is an ornamental characteristic of a great part of this people.

Their diversions are various. With some, dancing is a favourite amusement; others take a fancied pleasure at the gaming table, which, however, frequently terminates in the ruin of their happiness, fortunes, and constitutions. In the upper counties, horse-racing and cock-fighting prevail, two *cruel* diversions import-

ed from Virginia and the Carolinas, from whence those who practise them principally emigrated. But the most rational and universal amusement is hunting; and for this Georgia is particularly well calculated, as the woods abound with plenty of deer, racoons, rabbits, wild turkeys, and other game; at the same time the woods are so thin and free from obstructions, that you may generally ride half speed in chace without danger: in this amusement pleasure and profit are blended.* This exercise more than any other, contributes to health, fits for activity in business and expertness in

* The following account of a Georgia planter's method of spending his time is extracted from the American Museum for 1790:

About six in the morning he quits his bed, and orders his horse to be got ready; he then swallows a dram of bitters to prevent the ill effects of the early fogs, and sets out upon the tour of his plantation. In this route he takes an opportunity to stop at the negro houses, and if he sees any lurking about home, whose business it is to be in the field, he immediately inquires the cause; if no sufficient cause be given, he applies his rattan whip to the shoulders of the slave, and obliges him instantly to decamp. If sickness be alledged, the negroe is immediately shut up in the sick-house, bled, purged, and kept on low diet, till he either dies or gets into a way of recovery. After having examined the overseer relative to the welfare of the poultry, hogs, cattle, &c. he proceeds round the farm, takes a cursory view of the rice, corn, or indigo fields, and examines into the state of the fences and other inclosures; about the hour of eight, his circuit is finished, when, before he alights at his own door, a tribe of young negroes, in the primitive state of nakedness, rush out to meet him, and receive the horse.

Breakfast being over, he again mounts a fresh horse, and rides to the county town, or the first public house in the neighbourhood, where he talks politics, inquires the price of produce, makes bargains, plays a game at all-fours, or appoints days for horse races or boxing matches; about four o'clock he returns, bringing with him some friends or acquaintance to dinner. If the company be lively or agreeable, he rarely rises from table before sun set. If it be a wet evening, or the weather very disagreeable, cards or conversation employ him till bed time. If it be fair and no moonlight, after an early supper, a fire is kindled in a pan, and two or three of them set out stowed with some bottles of brandy, preceded by a negroe who carries the fire, in order to shoot deer in the woods, as these creatures are so attracted by a light, that they constantly stand still, and fix their eyes upon the blaze, by the reflection of which from the eye-ball they are easily discovered and shot. Sometimes, however, it happens, that tame cattle that have been turned into the woods to range, are killed by mistake.

About midnight they return, according to luck, with or without game; their skins and faces sadly scratched, and themselves fit for nothing but to be put to bed. This is the general routine of existence among such of the Georgians as live in the more retired and woody parts of the State. Others have their weekly societies, for sentimental and colloquial amusement; as to trade and business, it is entirely managed by overseers and factors.

war; the game also affords them a palatable food, and the skins a profitable article of commerce.

TRADE AND MANUFACTURES.

The chief articles of export are rice, tobacco, of which the county of Wilkes only exported, in 1788, about three thousand hogheads, indigo, sago, lumber of various kinds, naval-stores, leather, deer skins, snake root, myrtle and bees wax, corn, and live stock. The planters and farmers raise large stocks of cattle, from one hundred to fifteen hundred head, and some more.

The amount of exports in the year ending September 30th, 1791, was four hundred and ninety-one thousand four hundred and seventy-two dollars. In return for the enumerated exports, are imported West-India goods, teas, wines, various articles of cloathing, and dry goods of all kinds. From the northern States, cheese, fish, potatoes, apples, cyder, and shoes. The imports and exports of this State are principally to and from Savannah, which has a fine harbour, and is a place where the principal commercial business of the State is transacted. The trade with the Indians in furs and skins was very considerable before the war, but has since been interrupted by the wars in which they have been involved. The manufactures of this State have hitherto been very inconsiderable, if we except indigo, silk, and sago. The manner in which the indigo is cultivated and manufactured is as follows: the ground, which must be a strong rich soil, is thrown into beds of seven or eight feet wide, after having been made very mellow, and is then raked till it is fully pulverized: the seed is then sown in April, in rows at such a distance as conveniently to admit of hoeing between them. In July the first crop is fit to cut, being commonly two and a half feet high; it is then thrown into vats constructed for the purpose, and steeped about thirty hours; after which, the liquor is drawn off into other vats, where it is beat as they call it, by which means it is thrown into much such a state of agitation as cream is by churning. After this process, lime water is put into the liquor, which causes the particles of indigo to settle at the bottom. The liquor is then drawn off, and the sediment, which is the indigo, is taken out and spread on cloths, and partly dried; it is then put into boxes and pressed, and, while it is yet soft, cut into square pieces, which are thrown into the sun to dry, and then put up in casks for the market. They have commonly three cuttings a season. A middling crop for thirty acres is one thousand three hundred pounds.

The culture of silk and the manufacture of sago are at present but little attended to. The people in the lower part of this State manufacture none of their own cloathing for themselves or their negroes: for almost every article of their wearing apparel, as well as for their husbandry tools, they depend on their merchants, who import them from Great-Britain and the northern States. In the upper parts of the country, however, the inhabitants manufacture the chief part of their cloathing from cotton, hemp, and flax; and in general manufactures are on the increase.

STATE OF LITERATURE.

The literature of this State, which is yet in its infancy, is commencing on a plan which affords the most flattering prospects. It seems to have been the design of the legislature of this State, as far as possible, to unite their literary concerns, and provide for them in common, that the whole might feel the benefit, and no part be neglected or left a prey to party rage, private prejudices and contentions and consequent ignorance, their inseparable attendant. For this purpose, the literature of this State, like its policy, appears to be considered as one object, and in the same manner, subject to common and general regulations for the good of the whole. The charter, containing their present system of education, was passed in the year 1785. A college, with ample and liberal endowments, is instituted in Louisville, a high and healthy part of the country, near the center of the State. There is also provision made for the institution of an academy in each county in the State, to be supported from the same funds, and considered as parts and members of the same institution, under the general superintendence and direction of a president and board of trustees, appointed, for their literary accomplishments, from the different parts of the State, invested with the customary powers of corporations. The institutions thus composed and united is denominated, "The University of Georgia."

That this body of literati, to whom is intrusted the direction of the general literature of the State, may not be so detached and independant, as not to possess the confidence of the State; and, in order to secure the attention and patronage of the principal officers of government, the governor and council, the speaker of the House of Assembly, and the chief justice of the State, are associated with the board of trustees, in some of the great and more solemn duties of their office, such as making the laws, appointing the president, settling the property, and instituting

academies. Thus associated, they are denominated, "The Senate of the University," and are to hold a stated, annual meeting, at which the governor of the State presides,

The Senate appoint a board of commissioners in each county, for the particular management and direction of the academy, and the other schools in each county, who are to receive their instructions from, and are accountable to the Senate. The rector of each academy is an officer of the university, to be appointed by the president, with the advice of the trustees, and commissioned under the public seal, and is to attend with the other officers at the annual meeting of the Senate, to deliberate on the general interests of literature, and to determine on the course of instruction for the year, throughout the university. The president has the general charge and oversight of the whole, and is from time to time to visit them, to examine into their order and performances.

The funds for the support of their institution are principally in lands, amounting in the whole to about fifty thousand acres, a great part of which is of the best quality, and at present very valuable. There are also nearly six thousand pounds sterling in bonds, houses and town lots in the town of Augusta. Other public property to the amount of one thousand pounds in each county, has been set apart for the purposes of building and furnishing their respective academies.

C O N S T I T U T I O N .

The present constitution of this State was formed and established in the year 1789, and is nearly upon the plan of constitution of the United States.

I N D I A N S .

The Muskogee, or Creek Indians, inhabit the middle part of this State, and are the most numerous tribe of Indians of any within the limits of the United States; their whole number some years since was seventeen thousand two hundred and eighty, of which five thousand eight hundred and sixty were fighting men. They are composed of various tribes, who, after bloody wars, thought it good policy to unite and support themselves against the Chactaws, &c. They consist of the Appalachies, Alibamas, Abecas, Cawittaws, Coofas, Conshacks Coofactees, Chacsihoomas, Natchez, Oconies, Oakmulgies, Okohoyes, Pakanas, Tacsas, Talepoofas, Weetumkas, and some others. Their union

has rendered them victorious over the Chactaws, and formidable to all the nations around them. They are a well-made, expert, hardy, sagacious, politic people, extremely jealous of rights and averse to parting with their lands. They have abundance of tame cattle and swine, turkeys, ducks, and other poultry; they cultivate tobacco, rice, Indian corn, potatoes, beans, peas, cabbage, melons, and have plenty of peaches, plumbs, grapes, strawberries, and other fruits. They are faithful friends, but inveterate enemies; hospitable to strangers, and honest and fair in their dealings. No nation has a more contemptible opinion of the white men's faith in general than these people, yet they place great confidence in the United States, and wish to agree with them upon a permanent boundary, over which the southern States shall not trespass.

The country which they claim is bounded northward by about the 34th degree of latitude, and extends from the Tombeckbee, or Mobile river, to the Atlantic ocean, though they have ceded a part of this tract on the sea coast, by different treaties, to the State of Georgia. Their principal towns lie in latitude 32° , and longitede $11^{\circ} 20'$ from Philadelphia. They are settled in a hilly but not mountainous country; the soil is fruitful in a high degree, and well watered, abounding in creeks and rivulets from whence they are called the Creek Indians.*

The Chactaws, or flat heads, inhabit a very fine and extensive tract of hilly country, with large and fertile plains intervening, between the Alabama and Mississippi rivers, in the western part of this State. The nation had, not many years ago, forty-three towns and villages, in three divisions, containing twelve thousand one hundred and twenty-three souls, of which four thousand and forty-one were fighting men.

The Chickasaws are settled on the head branches of the Tombeckbee, Mobile, and Yazoo rivers in the north-west corner of

* General M'Gillivray, the celebrated chief of the Creeks, is a half-blooded Indian, his mother being a woman of high rank in the Creek nation. He was so highly esteemed among them, that they in a formal manner elected him their sovereign, and vested him with considerable powers. He has several sisters married to leading men among the Creeks. This gentlemen would gladly have remained a citizen of the United States; but having served under the British during the late war, his property in Georgia, which was considerable was confiscated. This circumstance induced him to retire among his friends the Creeks, since which he has been an active and zealous partisan in their interests and police.

the State. Their country is an extensive plain, tolerably well watered from springs, and of a pretty good soil. They have seven towns, the central one of which is in latitude $34^{\circ} 23'$, and longitude $14^{\circ} 30'$ west. The number of souls in this nation have been formerly reckoned at one thousand seven hundred and twenty-five, of which five hundred and seventy-five were fighting men.

WE have now with candour and a sincere attachment to truth, sketched the history of the several States in the federal union. In order to keep within the bounds proscribed in the plan first proposed, the accounts are restrained as far as possible to those subjects which we considered of the greatest importance, and we have aimed so to arrange the various subjects as we trust will afford a satisfactory answer to every question which the European inquirer may put respecting the government, commerce, society, learning, &c. of the United States. To have entered into a minute detail of every object that presented itself to our view would have been comparatively useless, it might have gratified the curiosity of a few, but the benefits would have been comparatively small to the public. To this we may add, that many of the scenes would have been shifting while under description, and the object in itself impracticable with respect to some of the States. In further pursuing our plan, we shall endeavour,

1st. To point out a few of the many advantages which America possesses over the different countries of Europe.

2d. What the advantages and prospects are which an European settler has presented to his view. Under this latter head we shall aim to convey all the information we can obtain that may prove advantageous in the passage to, or on the arrival at, what we must call a LAND OF LIBERTY.

OF THE ADVANTAGES

WHICH THE UNITED STATES POSSESS OVER
EUROPEAN COUNTRIES.

IN RESPECT TO GOVERNMENT.

WHILE the governments of most countries in Europe are perfectly despotic, and while those which are not actually such, appear to be verging fast towards it, the government of America is making rapid strides toward perfection; it being contrary to all the old governments in the hands of the people, they have exploded those principles by the operation of which civil and religious disqualifications and oppressions have been inflicted on mankind, and rejecting MERE TOLERATION, they have, with a small exception, placed upon an equal footing every church sect, and society of religious persons what soever.

Their laws and government have for their basis the natural and imprescriptible rights of man: liberty, security of person and property, resistance against oppression, doing whatever does not injure another, a right to concur, either personally or by their representatives, in the formation of laws and an equal chance of arriving to places of honour, reward or employment, according to their virtues, or talents. These are the principles of their constitution; and laws grafted upon these simple, but substantial principles, and a system of legal jurisprudence organized, and acting accordingly, form the essence of their government; and if ever the government swerves materially from these fundamental principles, the compact is dissolved, and things revert again to a co-equal state. By this plain definition of the nature of laws and government, every capacity, and every individual of the community, can judge with precision of the purity of legislation; this produces the most entire conviction in the minds of all men, of the necessity there is of acting, in every instance, according to the code of reason and truth. Every man in

America is equally concerned in the welfare and prosperity of his country and its government; for his own felicity can only be co-existent with it, and to suffer his ambition to run counter to the general weal would be madness in an enlightened commonwealth, as it could only tend to produce his own eternal disgrace and ruin, where the genius of freedom is enthroned in the heart of every citizen.

Europe has long been enslaved by forms and authorities; and while its multifarious laws and customs have served to perplex professional men, the sophistry employed in expounding them has completely bewildered the imagination of its citizens, and produced an obscurity of ideas upon the subject of jurisprudence and government, and a depravity of morals which is truly deplorable.

Religion, or what is called an establishment in Europe, has had and continues to have its share in rivetting the fetters of ignorance. The elucidation of truth has been retarded by the TYRANNY OF THE CHURCH; for while *priests have been the pedagogues of religion, morals, sentiments, and politics*, their INTERESTED VIEWS have caused them to flatter those governments whose interests it has been to keep the people ignorant, because it has secured to them the undisturbed division of the spoils of the great bulk of industrious citizens, while they were offering an indignity to the DEITY as gross as their system has been unnatural and unjust. What can be a greater presumption, or a higher pitch of arrogance, than presuming to arraign or judge of the sentiments of men, the propriety of which is to be determined before a tribunal in Heaven? It is an insult too gross to merit a comment. It has been subversive of all good morals, by affording a veil to cover the hypocrisy of the most designing knaves.

In America this evil has ceased to exist, the monster is destroyed, the natural alliance of church and state is broken, and the people left to the choice of their own religion, as well as of their own pastors; while they revere the former, will no doubt reward the latter as they merit; they will make a rapid progress in all the social virtues, while a class of men, who, from being privileged, had become the curse of Europe for more than three centuries, will in America, from the loss of all privileges but those which are the reward of piety and virtue, be the means of extending the knowledge and happiness of the human race.

In United States, every man who is taxed has a vote in the appointment of the representatives of the State in which he resides, as well as of the general government. Thus the people have the privilege of objecting to such characters for their governors as have not the public approbation ; which has the good effect of producing harmony between the government and the people—of obliging men who aspire to the honours of their country to respect the public opinion ; and as all the powers of government originate with, so they revert to the people ; the judiciary they have reserved to themselves through the medium of juries. The legislative they intrust to their representatives who are essentially the same ; and the executive emanates from the legislature, so that the whole are ultimately responsible to the people. The executive to the representatives, and the representatives, to their constituents.

A free government has often been compared to a pyramid. This allusion is made with peculiar propriety in the system of government adopted by the United States ; it is laid on the broad basis of the people ; its powers gradually rise, while they are confined, in proportion as they ascend. When you examine all its parts, they will invariably be found to preserve that essential mark of free government, and without which such a government cannot exist—a chain of connection with the people. The advantages resulting from this system, while they are great, will not be confined to the United States, it will draw from Europe many worthy characters who pant for the enjoyment of freedom. It will induce princes, in order to preserve their subjects, to restore to them a portion of that liberty of which they have for many ages deprived them. It will be subservient to the great designs of Providence with regard to this globe, the multiplication of mankind, their improvement in knowledge, and their advancement in happiness.

Nor are the immutable principles on which the American government is built, its only advantage to the people at large ; the same spirit that fixed it on the basis of liberty, has contributed to make the offices of government, posts of honour and not of profit ; hence the American government is administered at an expense so exceedingly trifling, that had the assertion been made of the practicableness of it a few years back, it would have obtained no credit. It is a well-known fact, that the general government of America does not amount to within forty thousand pounds per annum of the

English pension list; and if the government of the separate States are added to it, it will not make an addition thereto equal to what the amount of sinecure places would make to the pension list in Great-Britain; yet men of character and abilities are not waiting to fill its respective offices; but on the contrary, while the spirit of the government, by opening the channel of promotion to every individual, is truly favourable to the growth of genius, a virtuous ambition to be instrumental in promoting the happiness of mankind, always ensures a sufficient number of candidates for public confidence.

IN RESPECT OF NATIONAL DEBT.

The debt of the United States is divided into two classes, foreign and domestic. The foreign debt is composed, in capital, of a loan made in France of twenty-four millions of livres at five per cent.; another made in Holland, under the guarantee of France, of ten millions,

	dolls.
at four per cent. both amounting in dollars to	6,296,296
Spain at five per cent.	174,011
In Holland, in four different loans	3,600,000
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Total capital	10,070,307
Interest to December 31, 1789	1,651,257
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Total, capital and interest	11,721,564
Domestic debt liquidated, capital and interest, to the 31st of December, 1790	40,414,085
Not liquidated, estimated at	2,000,000
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Total, foreign and domestic, . . . 54,124,464

In the prosecution of the war each individual state had occasion to contract a debt of its own, which, for a variety of reasons, it was thought best that the Congress should assume and add to the general mass of the debt of the United States.

The sums thus assumed, which are supposed
to absorb nearly the whole of all the state debts,
amount in the whole to, . . . 25,000,000

So that the total amount of the present debt of the
United States is, . . . 79,124,464

Annual interest of this sum, as stipulated 4,587,444

Thus we see that the Americans pay less than a million sterling a year including the expenses of their government for having maintained their liberty: while Great-Britain pays more than four millions sterling additional annual expense for having attempted to deprive them of it; and by the measures taken by the new government, the Americans are in a fair way not only to pay their interest, but to sink the principal of their debt, and that without direct taxation.

Thus while the European governments draw annually from their subjects at least one fourth of their bona fide property to defray the interest of their public debt, the citizens of the United States are scarce sensible of any burthen arising therefrom; nay, on the contrary, in its present state, it is to them a real national advantage.*

EQUALITY OF SITUATION.

This is far from being the least of the advantages which America possesses over European nations. In the greater part

* If the secret history of the debt contracted in France were published it would discover the origin of many fortunes which have astonished us. It is certain, for instance, that M. de Vergennes disposed of those loans at pleasure, caused military stores and merchandize to be furnished by persons attached to him, and suffered not their accounts to be disputed. It is a fact, that in his accounts with Congress, there was one million of livres that he never accounted for, after all the demands that were made to him. It is likewise a fact, that out of the forty-seven millions pretended to be furnished in the above articles by France to Congress, the employment of twenty-one millions is without vouchers.

M. Beaumarchais, in a memoir published some years ago, pretends to be the creditor of Congress for millions. There is a report made to Congress by two respectable members, in which they prove, that he now owes Congress seven hundred and forty-two thousand four hundred and thirteen livres, and a million more, if the wandering million above mentioned has fallen into his hands. These reporters make a striking picture of the manœuvres practised to deceive the Americans.

Scarce a doubt, we think, can be entertained, but when the government of France shall be secured by external and internal tranquility, it will cause some account to be rendered of the sums squandered in the part which France took in the American war; or rather the sums which, instead of going to succour those brave strugglers for liberty, went to adorn the bed-chambers of an actress? Adeline did more mischief to the Americans than a regiment of Hessians.

of Europe the distance between the higher and lower classes of society is so great, as to beget on the part of the former a supercilious haughtiness, and almost total neglect of all the social virtues. The situations in which the privileged aristocracy of Europe are placed, may be considered as hotbeds of vice, ignorance and folly—nursed in principles of tyranny and superstition—born, as many of them are, to the enjoyment of unearned honours, and riches derived from plunder—placed in situations where they can gratify every lust and every brutal appetite, almost without controul—and enjoy every advantage that ought only to be the reward of virtue, without application to honest industry, it is not to be wondered at that they are sunk in the scale of rational beings, and degraded below the level of virtuous society. Perhaps a more contemptible figure cannot be imagined if properly considered, than what this class of men in general present to our view throughout Europe. Often without a single virtue, rolling at ease in splendour and profusion, preying upon the fruits of honest industry, and devouring the hard-earned morsel of the virtuous peasant. But this is not all, their depravity of manners and boundless course of dissipation and debauchery, extend their baneful influence through all the lower classes of society, and poison all the channels of human happiness. In America, this class of men are unknown, the mass of inhabitants, exclusive of servants, consists of those who possess in fee simple from one hundred to five hundred acres of land, actually in cultivation, together with the tradesmen immediately dependent on agriculture, most of whom are likewise farmers, with the storekeepers and mechanics in the different towns; no part of society preys on the other, but all contribute to the general good. A mediocrity of situation is common throughout the American States; there are few, indeed, whose incomes will reach two thousand pounds sterling per ann. and the number nearly as small, and perhaps smaller, who are reduced to a dependent situation. This happy medium is productive of the most beneficial consequences to their morals and their happiness; it supports that spirit of independence and love of liberty which laid the foundation of their government; it keeps far distant that servility so common to the lower orders of Europeans, and preserves them from the misery and wretchedness attendant on following the vices of the privileged orders.

VARIETY OF CLIMATE, SOIL AND PRODUCTIONS.

The United States possess in this respect an advantage over most of the European kingdoms, for they are not only subject to the gradations from almost extreme heat to extreme cold, but seem capable of supplying almost all the productions of the earth. Situated in the northern division of that extensive portion of the globe, between the thirty-first and forty-sixth degrees of northern latitude; the extreme length of their territory is about one thousand two hundred and fifty miles, the breadth about one thousand and forty. The superficies are computed to be six hundred and forty million acres of land and water: after deducting the space occupied by the capacious lakes and mighty rivers, which fertilize and accommodate this country, and occupy above a seventh part of its surface, there remain about five hundred and ninety millions of acres of fast land.

In so very extended a scene as might be naturally expected, the fruits of the earth are many and various: we find even in the present half-trying state of the capacities of the different soils and climates, a list of invaluable productions, some found by the first discoverers of the country, others introduced by mere accident, and others transported from Europe, during the simple state of agriculture in the last century. In the southern latitudes, particularly the States of Georgia, South-Carolina, and North-Carolina, rice, much superior to that of Italy or the Levant, is raised in very great quantities. The comparative value of this grain is twenty-five per cent. in the English markets for the American, more than the Italian or Levant rice: and from the ample quantity and goodness of American rice, it appears that little, if any Mediterranean rice is now imported into England, as it has for some time been omitted in the general account of prices. The South-Carolina crop alone, of 1789, appears to have been above one hundred thousand tierces, weighing sixty millions of pounds. It is expected that Virginia will add this article to her list of exports, as it is supposed a large body of swamp in her most eastern counties is capable of producing it; and mountain rice has been raised by way of experiment in the new country near the head of the Ohio.

Tobacco is a staple article of all the States, from Georgia as far north as Maryland, including both. Virginia alone, generally exported before the revolution, fifty-five thousand hogheads, weighing fifty-five millions of pounds; Maryland thirty thousand hogheads. The Carolinas and Georgia, which raised

but little of this article before the revolution, have, of late years, produced very large quantities: and as Virginia and Maryland are turning more of their attention to the cultivation of wheat, Indian corn, flax, and hemp, the Carolinas and Georgia will probably extend the cultivation of this plant, to which their soil and climate are well suited. The soil of Kentucky and the Cumberland and Tennessee country seems also to be eminently calculated for the culture of this plant.

Indigo, of an excellent quality, is produced by North-Carolina, South-Carolina, and Georgia. Of this valuable commodity, one million three hundred thousand pounds weight have been shipped from the city of Charleston alone in one year: but this, and the other two articles before mentioned, are raised in much less proportions in North-Carolina than in South-Carolina and Georgia. The uniform of the national troops has been heretofore of blue cloth, as also of the militia in general. Their clergy also by their customs wear this colour, and it is generally liked among the most frugal and most expensive people. These circumstances will no doubt be duly attended to in future laws and regulations, and will operate very favourably for the indigo planters, without any expense to the country.

Cotton has been lately adopted as an article of culture in the southern States; and as the prices of rice, tobacco, and indigo decline, it must be very beneficial to the owners and purchasers of lands in that part of the Union. This article is raised with ease in Spain, every part of which kingdom lies further north than the Carolinas, and in the same latitudes as Virginia, Maryland, and the Delaware States. It is also raised in that part of Asiatic Turkey which lies between Scanderoon and Smyrna, which are in the latitudes of the three last States. As the inhabitants increase very rapidly by emigration and the course of nature, it is certain they cannot procure wool from their own internal resources in sufficient quantities. The owners of cotton plantations may therefore expect a constant and great demand for this article, as a substitute for wool, besides its ordinary uses for light goods.

Tar, pitch, and turpentine are produced in immense quantities in North-Carolina, which State ships more of these articles, particularly the last, than all the rest of the Union. Tar and pitch are also produced in the southern parts of Jersey, and more or less in all the States southward of that.

Besides these, myrtle wax, and those two invaluable timbers, the live oak and red cedar, are peculiar to the Carolinas and

Georgia; and they have Indian corn, hemp, flax, boards, staves, shingles, leather, beef, pork, butter, minerals, fossils, and many other articles in common with the middle, or eastern States; also skins, furs, and ginseng from their Indian country.

The wheat country of the United States lies in Virginia, Maryland, Delaware, Pennsylvania, New-Jersey, and New-York, and the westernmost parts of Connecticut, as also the western parts of the two Carolinas, and probably of Georgia, for their own use. The character of the American flour is so well known, that it is unnecessary to say any thing in commendation of it here. Virginia exported before the war eight hundred thousand bushels of wheat; Maryland above half that quantity. The exports of flour from Pennsylvania with the wheat was equivalent to one million two hundred thousand bushels in 1788, and about two millions of bushels in 1789, which, however, was a very favourable year. New-York exports in flour and wheat equivalent to one million of bushels. In the wheat States are also produced great quantities of Indian corn or maize. Virginia formerly exported half a million of bushels per ann. Maryland ships a great deal of this article, and considerable quantities raised in Delaware, Pennsylvania, New-Jersey, New-York, and Connecticut, are exported; as are the wheat and flour of those five States, from Philadelphia and New-York, there being little foreign trade from Delaware or Jersey; and the western parts of Connecticut shipping with less expence from the ports on Hudson's river than those of their own State.

Hemp and flax are raised in very large quantities throughout the United States. And though South Carolina and Georgia produce less than any other States of these two articles, they are capable of raising immense quantities. Georgia, from the advantage she has in the river Savannah, could produce hemp with the greatest profit. Large portions of the new lands of all the States are well suited to hemp and flax.

Though sheep are bred in all parts of America, yet the most populous parts of the middle States, and the eastern States which have been long settled, and particularly the latter, are the places where they thrive best. In the four eastern or New-England States, they form one of the greatest objects of the farmer's attention, and one of his surest sources of profit. The demand for wool, which has of late increased exceedingly with the growth of manufactures, will add considerably to the former

handsome profits of sheep; and the consumption of meat by the manufacturers will render them still more beneficial.

Horned or neat cattle are also bred in every part of the United States. In the western counties of Virginia, the Carolinas, and Georgia, where they have an extensive range and mild winters without snows of any duration, they run at large, and multiply very fast. In the middle States, cattle require more of the care and attention they usually receive in Europe, and they are generally good, often very fine. But in the eastern States, whose principal objects on the land have until lately been pasturage and grazing, cattle are very numerous indeed, and universally fine; cheese is, of course, most abundant in those States. No European country can excel the United States in the valuable article of salt provisions. Their exports of this kind are every day increasing; as the raising of cattle is peculiarly profitable to farmers, the greater part of whom have more land than they can cultivate even with the plough. Barley and oats are the productions of every State, though least cultivated to the southward. Virginia, however, is turning her attention to barley, as also Maryland, and can raise great quantities.

Masts, spars, staves, heading, boards, plank, scantling, and square timber, are found in almost all the States; but New-Hampshire, and the adjoining province of Maine, which is connected with Massachusetts, are the two most plentiful scenes; the stock there seems almost inexhaustible. In New-York they abound; and in North-Carolina and Georgia, the pitch pine-plank, and scantling, and oak staves, are excellent, especially in the former. The stock of these articles on the Chesapeake and Delaware bays is more exhausted, but yet there is a great deal on the rivers of both for exportation, besides abundance for home consumption. Considerable quantities are also brought to the Charleston market, but a large part of them is from the adjacent States of Georgia and North-Carolina. When their internal navigation shall be improved, South-Carolina will open new sources of these articles.

Pot and pearl ashes, have become very valuable articles to the land-holders and merchants of the United States: but their importance was unknown twenty years ago. A single fact will illustrate the wealth that may be acquired by this manufacture. The State of Massachusetts, which has been settled twice as long as the other States on a medium, which contains about a fiftieth part of the territory of the United States which is

among the most populous of them, and consequently must have far less wood to spare than many other parts of the Union, has nevertheless shipped two hundred thousand dollars worth of these two articles in a year. New-England and New-York have derived great advantage from their attention to pot and pearl ashes; but it has hitherto been made in very inconsiderable quantities in the States to the southward of them: in most of them it has been entirely overlooked. New-Jersey and Delaware have more forests than Massachusetts; and as there is no part of either of those States that lies twenty-five miles from navigable water, they may venture to expend their wood, and to depend upon coal. In the other six States, which lie south of Hudson's river, the materials for pot ash are immense, as also in the State of New-York.

A grand dependence of the eastern States is their valuable fisheries; a detail of these is unnecessary. It is sufficient to say, that with a small exception in favour of New-York, the whole great sea fishery of the United States is carried on by New-England; and it is in a variety of ways highly beneficial to their landed and manufacturing interests.

Iron is abundant throughout the Union, excepting New-England and the Delaware State, though the former are not destitute of it, and the latter can draw it as conveniently from the other States on the Delaware river, as if it were in her own bowels. Virginia is the State most pregnant with minerals and fossils of any in the Union.

Deer skins and a variety of furs are obtained by all the States from the Indian country, either directly or through the medium of their neighbours. Hitherto they have been exported in large quantities; but from the rapid progress of American manufactures, that exportation must diminish.

The article of pork, so important in navigation and trade merits particular notice. The plenty of mast or nuts of the oak and beech, in some places, and of Indian corn every where, occasions it to be very fine and abundant. Two names among them are pre-eminent, Burlington and Connecticut; the first of which is generally given to the pork of Pennsylvania, and the middle and northern parts of Jersey; the second is the quality of all the pork north of Jersey. It may be safely affirmed, that they are fully equal to the pork of Ireland and Britany, and much cheaper.

Cider can be produced with ease in considerable quantities, from Virginia inclusive, to the most northern States, as also in

the western country of the Carolinas and Georgia; but New-Jersey and New-England have hitherto paid most attention to this drink. An exquisite brandy is distilled from the extensive peach orchards, which grow upon the numerous rivers of the Chetapeake, and in parts of Pennsylvania, and may be made in the greater part of the country.

Silk has been attempted with success in the southernmost States, so far as due attention was paid to it: but is not well suited to the nature of their labourers, who, being blacks, are not careful or skilful; and there are many other objects of more importance and profit in the agriculture of those fertile States. In Connecticut, where there is a sensible and careful white population, and where land is comparatively scarce and dear, it is found to be practicable and beneficial. A project to extend the white Italian mulberry tree over all the States has been formed, by some persevering individuals acquainted with the propagation of them. A great part of Connecticut is already supplied. An extensive nursery has been established near Philadelphia; another at Princeton in New-Jersey; and two more are at this time commenced on New-York and Long-Islands.

Rye is produced generally through all the States north of the Carolinas, and in the western parts of the three southern States. But the detail of American productions, and the parts in which they most abound, would be very long. It will therefore be sufficient to say, that in addition to the above capital articles, the United States produce or contain, flax-seed, spelts, lime-stone, alium, saltpetre, lead, copper, coal, free-stone, marble-stone for wares, potter's clay, brick clay, a variety of ship-timber, shingles, holly, beech, poplar, curled maple, black walnut, wild cherry, and other woods suitable for cabinet makers, shingles of cedar and cypress, myrtle-wax, bees-wax, butter, tallow, hides, leather, tanner's bark, maple sugar, hops, mustard seed, potatoes, and all the other principal vegetables; apples, and all the other principal fruits; clover, and all the other principal grasses. On the subject of their productions it is only necessary to add, that they must be numerous, diversified, and extremely valuable, as the various parts of their country lie in the same latitude as Spain, Portugal, the middle and southern provinces of France, the fertile island of Sicily, and the greater part of Italy, European and Asiatic Turkey, and the kingdom of China, which maintains by its own agriculture more people than any country in the world beside.

From these few observations we may form some idea of the advantages which the United States possess over most European countries in these respects ; it may be truly said, that there is not a luxury of nature but their soil is capable of yielding, and which the climate in one part or other of their territory would not bring to perfection. They can cultivate with ease every raw material for different manufactures which the surface of the earth yields, and its bowels yield them every necessary metal and fossil.

Connected with this, we may mention another advantage which the States possess : this is the ease with which the produce of one State may be conveyed, by water, to another, with a very trivial addition of expense. There is in this respect a striking difference between the navigable waters of the United States and those of any country in the old world. The Elbe is the only river in Europe which will permit a sea vessel to sail up it for so great a length as seventy miles. The Hudson's, or north river, between the States of New-York and New-Jersey, is navigated by sea vessels one hundred and eighty miles from the ocean ; the Delaware, between Pennsylvania, New-Jersey, and the Delaware State, one hundred and sixty miles ; the Potomack, between Virginia and Maryland, three hundred miles : and there are several other rivers, bays, and sounds, of extensive navigation, far exceeding the great river Elbe. The inland boatable waters and lakes are equally numerous and great.

When we consider these, and extend our ideas to the different canals already formed, and still forming, by which the most important rivers are, or will be united, we may venture to assert, that no country in Europe does, or possibly can possess so completely the advantages of inland navigation ; by this the extremes of the confederacy will become intimately united and acquainted with each other, and each State will reap from the produce of the whole nearly the same advantage as though it possessed every resource within itself ; indeed, no doubt can by a reflecting mind be entertained, but that the time is near when a communication by water will be opened with every part of the Union.

In a country thus circumstanced, producing the great raw materials for manufactures, and possessing unlimited powers, by water and resources of fuel subject also to heavy char-

ges upon the importation of foreign fabrics, to neglect manufactures would have been almost criminal. These important ideas have taken full possession of the American mind. The theory is now every where approved; and in New-England, Pennsylvania, and several other States, the practice has been taken up with considerable spirit and very extensively pursued.

These are but a few of the advantages America possesses over the different nations in Europe, but they are such as have laid the foundation of her present, and which insure her future prosperity.

We shall now proceed to state as briefly as possible the prospects and advantages which the European settler has almost the certainty of realizing.

OF THE
PROSPECTS AND ADVANTAGES
OF AN
EUROPEAN SETTLER
IN THE UNITED STATES.

BEFORE we enter on this part of the work, we wish to premise to the reader that we shall proceed with caution. The numbers that have emigrated to America from this country have already awakened the fears of some, and the envy of others ; and some who appear conscious of the consequences that must follow from a spirit of emigration, have thought it their duty to step forward and by magnifying trifling difficulties into insurmountable obstacles, attempt to put a stop to a system, which, though its effects are slow, are not the less sure in weakening the strength and resources of the European countries. Hence slight skirmishes with the Indians have been magnified to the most tremendous battles. The residence of a small portion of persons to the levying of a tax in one or two States has been worked up to a universal rebellion throughout the Union. A fever raging at Philadelphia for a short period, and which is now admitted to have originated in the exposure of damaged coffee, has been held forth as a proof of an unhealthy climate throughout the States ; and the intemperate zeal of a few individuals has been considered a sufficient proof that the whole body of Americans are averse to the prudent and temperate conduct of their government. The impressions made on the public mind by these means have received additional strength from a few individuals, who, like the spies sent to view the land of Canaan, have, through idleness, or attachment to European dissipation, cast away the clusters of grapes, and returned with an evil report of the land. If we credit those, the

United States are ruined---trade is bad----every thing is dear—all is confusion—the people slaves—and the United-States unable to furnish employment or support to those who wish there to take up their residence. These and almost ten thousand other evils are conveyed to us through the medium of letters inserted in the daily papers dated from different parts of America, but which carry with them internal evidence of being the production of hireling scribblers, employed for the purpose of misleading the unthinking mind.

In order therefore to follow this subject through all its connections, and to set the prospects of an European settler in a clear point of view, it will be necessary to proceed in the inquiry under some kind of system, that its different parts may stand clear and distinct, and yet form one connected whole. As an introductory part it may therefore be necessary to rectify some mistaken notions of Europeans respecting the American States.

MISTAKEN NOTIONS OF EUROPEANS.

Many persons in Europe appear to have formed mistaken ideas and expectations of what is to be obtained in America; it may therefore be useful, and prevent inconvenient, expensive, and fruitless removals and voyages of improper persons, to give some clear and truer notions of that part of the world than appear to have hitherto prevailed.

It is imagined by numbers, that the inhabitants of North-America are rich, capable of rewarding and disposed to reward all sorts of ingenuity; that they are at the same time in a great degree ignorant of all the sciences; and consequently that strangers possessing talents in the belles lettres, fine arts, &c. must be highly esteemed, and so well paid as to become easily rich themselves; that there are also abundance of profitable offices to be disposed of, which the natives are not qualified to fill; and that having few persons of family among them, *strangers of birth* must be greatly respected, and of course easily obtain the best of those offices, which will make all their fortunes; that the governments too, to encourage emigrations from Europe, not only often pay the expense of personal transportation, but give lands gratis to strangers, with negroes to work for them, utensils of husbandry, and stocks of cattle. These are, in the general, wild imaginations; and those who go to America with expectations founded upon them, will surely find themselves disappointed.

The truth is, that though there are in America few people of the description of the poor of Europe, there are also very few that in Europe would be called rich. It is rather, as before observed, a general happy mediocrity that prevails. There are few great proprietors of the soil, and few tenants; most people cultivate their own lands, or follow some handicraft or merchandise; very few are rich enough to live idly upon their rents or incomes, or to pay the high prices given in Europe for paintings, statues, architecture, and the other works of art that are more curious than useful. Hence the natural geniuses that have *arisen* in America, with such talents, have in general quitted that country for Europe, where they can be more suitably rewarded. It is true that letters and mathematical knowledge are in esteem there, but they are at the same time more common than is apprehended: there being already existing numerous colleges or universities, for the most part furnished with learned professors, besides a number of smaller academies. These educate many of their youth in the languages, and those sciences that qualify men for the profession of divinity, law, and physic. Strangers, indeed, are by no means excluded from exercising those professions; and the quick increase of inhabitants every where gives them an almost certainty of employ, which they have in common with the natives. Of civil offices or employments there are few; no superfluous ones as in Europe; and it is a rule established in some of the States, that no office should be so profitable as to make it desirable for the income. The thirty-sixth article of the constitution of Pennsylvania runs expressly in these words: "As every freeman, to preserve his
 " independence, if he has not a sufficient estate, ought to have
 " some profession, calling, trade, or farm, whereby he may
 " honestly subsist, there can be no necessity for, nor use in
 " establishing offices of profit; the usual effects of which are
 " dependence and servility, unbecoming freemen in the posses-
 " sors and expectants, faction, contention, corruption and dis-
 " order among the people. Wherefore, whenever an office,
 " through increase of fees or otherwise, becomes so profitable as
 " to occasion many to apply for it, the profits ought to be lessen-
 " ed by the legislature."

These ideas prevailing more or less in all the United States, it cannot be worth any man's while to expatriate himself in hopes of obtaining a profitable civil office in America; and as to military offices, they ended with the war, the armies being disbanded and reduced to a national militia. Much less is it advisable for a person to go thither who has no other quality to recommend

him than his birth. In Europe it has, indeed, its value, but it is a commodity that cannot be carried to a worse market than to that of America, where people do not inquire concerning a stranger, *What is he?* or, *Who is he?* but *What can he do?* If he has any useful art he is welcome, and if he exercises it, and behaves well, he will be respected by all that know him: but a mere man of quality, who on that account wants to live upon the public, by some office or salary, will be despised and disregarded. The husbandman is in honour there, and even the mechanic, because their employments are useful. The people have a saying, that "God Almighty is himself a mechanic, the greatest in the universe; and a man is respected and admired more for the variety, ingenuity and utility of his handy-works, than for the antiquity of his family. They are pleased with the observation of a negro, and frequently mention it, that "Boccarorra (meaning the white man) make de black man workee, make de horse workee, make de ox workee, make ebery ting workee, only de hog. He de hog, no workee: he eat, he drink, he walk about, he go to sleep when he please, *he libb like a gentleman.*" According to these opinions of the Americans, one of them would think himself more obliged to a genealogist, who could prove for him, that his ancestors and relations, for ten generations, had been ploughmen, smiths, carpenters, turners, weavers, tanners, or shoemakers, and consequently, prove that they were useful members of society; than if he could only prove that they were *gentlemen*, doing nothing of value, but living idly on the labour of others, mere *fruges consumere nati*,* and otherwise good for nothing, till, by their death, their estates, like the carcase of the negro's gentleman-hog, come to be cut up.

With regard to encouragements to strangers from the American government, they are really only what are derived from GOOD LAWS AND GENUINE LIBERTY. Strangers are welcome because there is room enough for them all, and therefore the old inhabitants are not jealous of them; the laws protect them sufficiently, so that they have no need of the patronage of great men; and every one will enjoy securely the profits of his industry. But, if he does not bring a fortune with him, he must work and be industrious if he gains one. One or two years residence give him all the rights of a citizen: but the government does not at present, whatever it may have done in former times,

* There are a number of us born
Merely to eat up the corn

hire people to become settlers, by paying their passages, giving land, negroes, utensils, stock or any other kind of emolument whatsoever. In short, America is a land of labour, and by no means what the English call *Luüberland*, and the French, *Pays de Cocagne*.

Those who desire to understand the state of government in America, should read the constitutions of the several States, and the articles of confederation that bind the whole together for general purposes, under the direction of one assembly called the Congress. These constitutions we have for the most part given at length, in our account of the different States in the Union ; and where that is not done, the reader may rest assured there is no material variation. These constitutions convey, in the clearest manner, the principles and practice of the American government, and furnish a body of political information scarcely to be found in any other compositions.

MOTIVES TO EMIGRATION.

If the above observations are considered as true, it may naturally be asked, WHAT ARE THE GENERAL INDUCEMENTS TO QUIT EUROPE FOR THE PURPOSE OF SETTLING IN AMERICA?

To this query we shall, *without hesitation*, reply, that the first and principal inducement to an European to quit his native country for America, is THE TOTAL ABSENCE OF ANXIETY RESPECTING THE FUTURE SUCCESS OF A FAMILY. There is little fault to find with the government of America, either in principle or in practice ; they have very few taxes to pay and those are of acknowledged necessity, and moderate in amount ; they have no animosities about religion ; it is a subject about which no questions are asked : they have few respecting political men, or political measures : the present irritation of men's minds in Great-Britain, and the discordant state of society on political accounts, is not known there. The government is the government OF THE PEOPLE, and FOR THE PEOPLE. There are no tythes nor game laws ; and excise laws upon spirits only, and similar to the British only in name. There are no men of great rank, nor many of great riches. Nor have the rich there the power of oppressing the less rich, for, as we have before observed, poverty, such as is common in Great-Britain, is almost unknown, nor are their streets crowded with beggars ; Mr. Cooper observes, he saw but one only while he was there, and that was an Englishman. You see no where in America the

disgusting and melancholy contrast *so common* in Europe, of vice and filth, and rags, and wretchedness, in the immediate neighbourhood of the most wanton extravagance, and the most useless and luxurious parade. Nor are the common people so deprived as in Great Britain. Quarrels are uncommon, and boxing matches unknown in their streets. They have no military to keep the people in awe, nor hired spies and informers to pierce the inmost recesses of society, and to call forth one part of a family against another; thus destroying domestic quiet and public happiness. Robberies are very rare. There was not a burglary in Philadelphia during the fever there, though no one staid in the town who could leave it. All these are real advantages; but great as they are, they do not weigh with us so much as the single consideration first mentioned.

In England the young man flies to prostitution, for fear of the expence of a family establishment, and the, *more than probable* extravagance of a wife; celibacy is a part of prudence; it is openly commended, and as steadily practised as the voice of nature will allow. The married man, whose passions have been stronger, whose morals have been less callous, or whose interest has furnished motives to matrimony, doubts whether each child be not a misfortune, and looks upon his offspring with a melancholy kind of affection, that embitters some of the otherwise most pleasurable moments of his life. There are exceptions to this from great success in the pursuits of the father; there are exceptions from stronger degrees of parental affection; and the more sanguine look forward with stronger hope: but we have seen too much not to be satisfied of the perfect truth of this *general* position. We do not care what may be the situation in life of the parents, or the rank to which they belong; from the labourer at six or seven shillings per week, and many thousands of such there are in Great-Britain, to the peer of twenty-five thousand pounds per annum, through many intermediate ranks, we have had too frequent occasion to observe this melancholy fact.

In the former instance, the labourer consoles himself, with tears in his eyes, for the loss of his children, because *he has one or more less to provide for*; and in the second instance his lordship retrenches his pleasures because *he has a large family*.

In America, particularly out of the large towns, no man of moderate desires feels anxious about a family. In the country, where the mass of the people dwell, every man feels the increase of his family to be the increase of his riches: and no

farmer doubts about the facility of providing for his children as comfortably as they have lived, where land is so cheap and so fertile, where society is so much on an equality, and where the prodigious increase of population, from natural and accidental causes, and the improving state of every part of the country, furnishes a market for whatever superfluous produce he chooses to raise, without presenting incessantly that temptation to artificial expense and extravagant competition so common and so ruinous in European countries.

In Great-Britain, PERPETUAL EXERTION, INCESSANT, UNREMITTING INDUSTRY, DAILY DEPRIVATION OF THE COMFORTS OF LIFE, and anxious attention to minute frugality, are almost incumbent on a man of moderate fortune, and in the middle class of life: and the probabilities of ultimate success are certainly against a large family. In England, no man has a right, calculating upon the common chances, to expect that five or six children shall all succeed, however virtuous or industrious they may be.

In America it is otherwise; you may reasonably reckon upon a comfortable settlement, according to your situation in life, for every part of a family, however numerous. There is nothing in European countries equivalent to the taking off this weight upon the mind of a father of a family. It is felt in the occurrences of every day. Mr. Cooper remarks, he has seen with pleasure the countenance of an European emigrant in America, brightened up on this very comfortable reflection; a reflection which consoles even for loss of friends, and exile from a native country.

To persons in genteel life, and of the class which we call men of fortune nearly the same difficulties occur: with us every rank treads so close on the heels of the rank above it, that an *excess of expense above income, is general*; and perhaps the difficulties of a family are still greater in the class last mentioned. Temptations to unnecessary expense, owing to the numerous gradations of rank in England, are perpetual and almost unconquerable. With the Americans, man is more equitably appreciated; he is estimated more at what he *is* and less at what he *seems*. Something like European manners, and something of the ill effect of inequality of riches, may indeed be found in the great towns of America, but nothing like what an inhabitant of the old country experiences; and the *mass* of the people in America are nearly untainted. Hence the freedom from artificial poverty, and the universal diffusion of the common comforts and conveniences of life.

In England, if a man has been pecuniarily unfortunate, the eager crowd press on and trample over him, and, once down, he is kept down. In America, a false step is not irretrievable, there is room to get up again; and the less unfortunate stumbler looks round at leisure, and without dismay for some more profitable path to be pursued. In England, every employment is full, we are pressed and elbowed on all sides; in America, every employment has room for industry, and for many years almost every species of industry must be successful. In fine, America is a rising country, but there is cause to fear, that most of the European countries are going fast to ruin and decay.

In America, the expenses of the government are very much less, in proportion to wealth and numbers, than those of any nation in Europe.

There is no land tax among the national revenues, nor is there any interior tax, or excise upon food, drink, fuel, lights, or any native or foreign manufacture, or native or foreign production, except a duty of about four pence sterling upon domestic distilled spirits. The greatest part of the public burdens are paid by an import duty on foreign goods, which being drawn back on exportation, it remains only on what is actually used, and is in that view the lowest in the world. In England, there is scarce an article that an individual can eat, drink or wear, but what is taxed double, treble and sometimes more than what was its original intrinsic value.

Trade has been encouraged by a drawback of all the import duty on foreign goods, when they are exported, excepting only a very few commodities of a particular nature, which are not desired to be much imported into, or consumed, in, the United States.

A national mint is established under the direction of the ablest practical man in the arts and sciences which America affords, DAVID RITTENHOUSE. It is provided by law, that the purity and intrinsic value of the silver coins shall be equal to that of Spain, and of the gold coins to those of the strictest European nations. The government of the United States foregoes all profit from the coinage; this is certainly an honest, a politic and wholesome forbearance, but America is the first that has adopted it.

The banks established in the several cities of Philadelphia, New-York, Boston, Baltimore, Charleston, Alexandria, &c. divide a profit of seven and a half to eight and a half per cent. per annum * at present, which is paid half-yearly. The

* More might be said with truth.

interest of the public debt of the United States is paid every quarter of a year with a punctuality absolute and perfect. There is no tax on property in the funds and banks.

The ship-building of the United States has been on the increase ever since the revolution; it was greater in the year 1793 than in any former year since the settlement of the country, and it is greater in the current year than it was in the last. Generally speaking, the art of ship-building was never so well understood, never so well executed, nor was there ever a time when so many of the manufactures requisite for the furniture, tackle, apparel, and arming of vessels, were made in the United States.

The value of the manufactures of the United States is certainly greater than double the value of their exports in native commodities, and much greater than the gross value of all their imports, including the value of goods exported again.

These manufactures consist generally of articles of comfort, utility and necessity. Articles of luxury, elegance and show, are not manufactured in America, excepting a few kinds. Manufactures in general have increased very rapidly since the commencement of the revolution war, and particularly in the last five years.*

The exports of the United States have increased in the last three years from fourteen to twenty per cent.† These exports consist, in a great degree, of the most necessary food of man, of working animals, and of raw materials, applicable to manufactures of the most general utility and consumption.‡

The exports of the United States are six times the amount of the national taxes and duties; and the amount of the outward freight of the ships and vessels of the United States at this time, is probably more than equal to all their nation-

* Household manufactures are carried on within the families of almost all the farmers and planters, and of a great proportion of the inhabitants of the villages and towns. This practice is increasing under the animating influences of private interest and public spirit.

† In the three years ending Sept. 30, 1793, they increased from eighteen millions and one quarter to twenty six millions of dollars.

‡ There is not any duty upon the exportation of the produce of the earth nor can such duty be imposed on any exported commodities, but the exportation of produce may be suspended or prohibited in cases of necessity or policy.

— Produce and all other merchandize may be freely exported in the ships and vessels of all nations, not being alien enemies, without discrimination.

al taxes and duties. The inward freight is considerable. The earnings of the fishing vessels, in lieu of freight, are also considerable. But the coasting freights are greater in value than both the last.

All ships and vessels depart from the United States, fully laden, excepting a part of the East-India traders; and a large quantity of tonnage is employed in the coasting trade; and a considerable quantity in the cod and whale fisheries.

The imports of the United States are less in value than the exports, deducting the outward freights of their own ships, which are returned in goods, the nett sails of their ships to foreigners, and the property imported by migraters from foreign countries.

The very great proportion of the imports, which consists of manufactures from raw materials, which America can produce, affords constant and inviting opportunities to lessen the balance against the United State in their trade with foreign countries, holds out a *certain* home market to skilful and industrious manufacturers in America, and gives the most flattering expectations to the landholder and farmer, of a very increasing demand for his produce, *in which he cannot be deceived.**

Their imports have not been swelled in proportion to the increase of their population and wealth. *The reason is clear, viz. the constant introduction of new branches of manufacture amongst themselves, and a great extension of the old branches.*

Their imports for consumption are composed of manufactures in a much less proportion than heretofore, owing to *the same two causes.*

The imports of the United States have almost ceased to exhibit certain articles of naval and military supply, and others of the greatest utility and consumption, owing also to *the same two causes.*

Their imports consist but in a small degree of necessities, in a great degree of articles of comfortable accommodations, and in some degree of luxuries; but their exports consist chiefly of prime necessities, of the utmost importance to Europeans, with some articles of mere comfort and utility, and some of luxury. The following will be found to be the quantities of some of the principal articles of exportation from the United States, during the year ending in September, 1792.

* Witness the steady price of their produce during the embargo.

- 3,145,255 Bushels of grain and pulse, principally wheat, Indian corn, ryē, beans and peas.
- 44,752 Horses, horned cattle, mules, hogs and sheep.
- 1,469,723 Barrels of flour, meal, biscuit and rice, reducing casks of various sizes to the proportion of flour barrels.
- 146,909 Barrels of tar, pitch, turpentine and rosin.
- 116,803 Barrels of beef, pork, mutton, sausages, oysters, tripe, &c. reducing casks of various sizes, to the proportion of beef and pork barrels.
- 231,776 Barrels of dried and pickled fish, reducing them to barrels of the same size.
- 948,115 Gallons of spirits, distilled in the United States.
- 7,823 Tons, 12 cwts. and 14lb. of pot and pearl ashes.
- 112,428 Hogheads of tobacco.
- 60,646,861 Feet of boards, plank and scantling.
- 19,391½ Tons of timber.
- 18,374 Pieces of timber.
- 1,080 Cedar and oak ship knees.
- 71,693,863 Shingles.
- 31,760,702 Staves and hoops.
- 191 Frames of houses.
- 73,318 Oars, rafters for oars, and hand-spikes.
- 48,860 Shook or knock-down casks.
- 52,381 Hogheads of flax-seed.

The exports of the year of which the above are a part, amounted to twenty-one millions of dollars; but the exports of the next following year ending on September 30, 1793, amounted to five millions more, being twenty-six millions of dollars. Provisions and raw materials have greatly increased. Of flour alone there were shipped one million and thirteen thousand of casks.

The imports of the United States are now generally brought directly, and not circuitously, from the countries which produced or manufactured them. China, India Proper, the isles of Bourbon and Mauritius, Good Hope, the southern settlements of America and the West-Indies, the Wine islands, and the countries on the Mediterranean and Baltic seas, Great-Britain and Ireland, France, the Netherlands and Germany, Spain and Portugal.

Thus their commerce is diversified and prosperous, and consists in importing for their own consumption, and for exportation, in the exporting, the coasting and inland trades, the Indian trade, manufactures, shipping, the fisheries, banking, and insurances on ships cargoes, and houses. There is no branch of commerce, for-

oreign or domestic, in which every district, city, port and individual is not equally entitled to be interested. *

The commanders and other officers of American ships are deemed skilful and judicious; from which cause, combined with the goodness of their ships and of their equipment, insurances upon their vessels are generally made in Europe, upon the most favourable terms, compared with the corresponding risques on board of the vessels of other nations.

The lawful interest of money is six per cent. per annum, in most of the states; in a few it is seven per cent.; in one it is five per cent.

The poor taxes in the United States are very small, owing to the facility with which every man and woman, and every child, who is old enough to do the lightest work, can procure a comfortable subsistence. The industrious poor, if frugal and sober, often place themselves in a few years above want.

Horses and cattle, and other useful beasts, imported for breeding, are exempted by law from the import duty.

The clothes, books, household furniture, and the tools or implements of their trade or profession, brought by emigrators to America, are exempted from the import duty, and they may begin their commerce, manufacturies, trades or agriculture, on the day of their arrival, upon the same footing as a native citizen; and there is no greater nor other tax upon foreigners or their property in the United States, than upon native citizens.

Almost every known Christian church exists in the United States; as also the Hebrew church. There has not been a dispute between any two sects or churches since the revolution. There are no tythes; marriage and burial fees, glebes, land rents, pew rents, monies at interest and voluntary contributions, are

* The slave trade is abolished, and American citizens cannot lawfully be employed therein, and in some instances negroe slavery: in others they have adopted efficacious measures for its certain, but gradual abolition. The importation of slaves is discontinued, and can never be renewed, so as to interrupt the repose of Africa, or endanger the tranquillity of the United States. The steady use of efficacious alternatives is preferred to the immediate application of more strong remedies, in a case of so much momentary and intrinsic importance.

the principal means of supporting the clergy. Many of them are also professors and teachers in the universities, colleges, academies and schools, for which interesting stations, pious and learned ministers of religion are deemed peculiarly suitable. There is no provision in the Episcopal, Presbyterian, or independent church for any clerical person or character above a rector or minister of the gospel ; and this is generally, if not universally the case. There are some assistant ministers, but no curates or vicars.

All the lands in the United States are free from tythes, and the medium purchase is not equal to the annual land rents of Europe ; even including in the estimate the value of the old improved farms in America, and the great mass of unimproved lands.

The productions and manufactures of military supplies and articles enable the United States to derive from their own resources, ships of war, gunpowder, cannon and musket balls, shells, and bombs, cannon and carriages, rifles and cutlasses, grapnals, iron, lead, cartouch boxes, sword belts, cartridge paper, saddles, bridles, and holsters, soldiers' and sailors' hats, buckles, shoes, and boots, leathern breeches, naval stores, sheathing paper, malt and spirituous liquors, manufactured tobacco, soap, candles, lard, butter, beef, pork, bacon, hams, peas, biscuit, and flour, and other articles for the land or marine service.

The education of youth has engaged a share of the attention of the legislature of the States. Night schools for young men and boys, who are employed at labour or business in the day time, have been long and beneficially supported, and the idea of Sunday schools has been zealously adopted in some places. Free schools for both sexes have increased, and greater attention than heretofore is paid to female education.

The people of the United States are ingenious in the invention, and prompt and accurate in the execution of machanism and workmanship, for purposes in science, arts, manufacturies, navigation and agriculture, Rittenhouse's planetarium, Franklin's electrical conductor, Godfrey's quadrant improved by Hadley, Ramsay's and Fitch's steam engines, Lisle's rod pendulum, and other horological inventions, the construction of ships, the New-England whale-boat, the construction of flour-mills, the wire-

cutter and bender for card makers, Folsom's and Briggs's machinery for cutting nails out of rolled iron, the Philadelphia dray with an inclined plane, Mason's engine for extinguishing fire, the Connecticut steeple clock, which is wound up by the wind, the Franklin fire place, the Rittenhouse stove, Anderson's threshing machine, Rittenhouse's instrument for taking levels, Donaldson's Hippopotomas and balances lock, are a few of the numerous examples.

There is no discription of men in America, and there are very few individuals in the active time of life, who live without some pursuit of business, profession, occupation, or trade. All the citizens are in active habits, and all capital stock is kept in action.*

No country of the same wealth, intelligence, and civilization, has so few *menial* servants, strictly speaking, in the families of persons of the greatest property. Family servants and farming servants, who emigrate from Europe, and who continue soberly and industriously in family or farm service, for one, two, or three years, commonly find opportunities to better their situations, by getting into some comfortable line of dealing, or trade, or manufacturing, or farming, according to their education, knowledge and qualifications.

America has not, indeed, many charms for the dissipated and voluptuous part of mankind, but very many, indeed, for the rational sober-minded and discreet. It is a country which affords great opportunities of comfort and prosperity to people of good property, and those of moderate property, and to the industrious and honest poor: a singular and pleasing proof of which last assertion is, that there are very few, if any day labourers in the city and liberties of Philadelphia, of the Quaker church. That religious society is very numerous; but the sobriety, industry, and frugality which they practise, enables their poor quickly to improve their condition, in a country so favourable to the poorest members of the community.

That part of the tradesmen and manufacturers who live in the country, generally reside on small lots and farms, of from one acre to twenty, and not a few upon farms of twenty to one hundred and fifty acres, which they cultivate at leisure times with their own hands, their wives, children, servants, and apprentices, and sometimes by hired labourers, or by letting out fields for a part of the produce to some neighbour, who has time or farm hands not fully employed. This union of manufactures

* It is probable that all the jewels and diamonds worn by the citizens of the United States, their wives and daughters, are less in value than those which sometimes form a part of the dress of an individual in several countries of Europe.

and farming is found to be very convenient on the grain farms, but it is still more convenient on the grazing and grass farms, where parts of almost every day, and a great part of every year, can be spared from the business of the farm, and employed in some mechanical, handicraft, or manufacturing business. These persons often make domestic and farming carriages, implements, and utensils, build houses and barns, tan leather, manufacture hats, shoes, hosiery, cabinet work, and other articles of cloathing and furniture, to the great convenience and advantage of the neighbourhood. In like manner some of the farmers at leisure times and proper seasons, manufacture nails, pot ash, pearl ash, staves and heading, hoops and hand spikes, axe handles, maple sugar, &c. The most judicious planters in the southern States are industriously instructing their negroes, particularly the young, the old, the infirm, and the females, in manufactures.

A large proportion of the most successful manufacturers in the United States are persons who were journeymen, and in some instances foremen in the workshops and manufactories of Europe, who having been skilful, sober, and frugal, and having thus saved a little money, have set up for themselves with great advantage in America, and few have failed to succeed.

From this brief sketch we may justly draw this conclusion, that the advantages America offers to European emigrants are such as no country beside can hold forth.

ON THE CHOICE OF RESIDENCE.

Supposing an individual from political sentiments or other circumstances, to have formed a resolution of taking up his residence in the United States, a question will naturally arise, what part of America is best adapted to his purpose? The answer to this question will certainly depend much on the disposition, circumstances, and pursuits of the person himself. Some few circumstances may, however, influence nearly the whole class of English emigrants.

Quitting a country where the church is forced into an unnatural connection with the state, and where religious opinions are the subject of popular obloquy, and civil disqualifications; such will seek in America an asylum from civil persecution and religious intolerance—some spot where they will suffer no defalcation in political rights, on account of theological opinions, and where they may be permitted to enjoy a perfect

freedom of *speech* as well as of sentiment, on the two most important subjects of human inquiry, religion and politics.

As the people of England have opposed the system of negro slavery, the most part will have very strong, if not insuperable objections, to those parts of the continent where slaves are the only servants to be procured, and where the practice of the country tends to support this humiliating distinction between man and man. But as labourers in husbandry, as well as for domestic purposes, will be necessary, some situation must be chosen where servants may be procured with tolerable facility, although slavery does not prevail.

As the period of civil commotion and internal warfare, seems in the opinion of most persons, not far distant in almost every part of Europe, such would wish, we suppose, to fix in a place where they are likely to enjoy the blessings of peace, without the hazard of interruption from any circumstances at present to be foreseen. Dreading the prospect, however distant, of turbulence and bloodshed in the old country, they will hardly expose themselves unnecessarily to similar dangers in the new; they will therefore not direct their course toward those parts of the continent, where the present enmity or uncertain friendship of the American Indians will render peace, proper and personal security in any great degree dubious.

If their fortune is not large, such will think it an object to consider in what way they can improve it; where and how they can live most comfortably upon small property and moderate industry. If, indeed, a *number* of people personally, or by reputation, acquainted with each other, with similar habits of life, and general pursuits, were to quit England together, they would naturally endeavour to pitch upon a settlement where they need not be so divided as to renounce the society they had been accustomed to enjoy; or to accommodate themselves suddenly to a change of habits, manners, friends, and associates. With many of them in middle life, or advanced in years, this would be a circumstance of importance to their future comfort; and therefore no situation for a *number* of persons of this description could be perfectly eligible, where this accommodation could not be procured. It would in such a case therefore be desirable to fix upon some part of the continent where a large body of contiguous land could readily be procured at a reasonable price. We say, at a reasonable price, because the persons who would be likely to quit England for America, must, in our opinion, as one *principal* inducement, have in view the more easy improvement of a small fortune, and the more easy

settlement of a large family; and it would therefore be expedient that such a situation were chosen, and such a plan of settlement adopted, as would hold out a reasonable expectation of a gradual increase in the value of that property in which they shall be induced to invest the wreck of their British fortunes. Perhaps the purchase of land in some of the American States is the most speedy as well as the most certain means of improving a present capital; especially to those who can give an immediate increased value, by settling as neighbours on their own contiguous farms. In this view, therefore, and for this purpose, such should endeavour to procure a large tract, and at a price not only reasonable, but so low in the first instance as to admit of an early increased value, by the means of a neighbourhood and improving resident proprietors. Were such a plan to take place, we have no hesitation in saying, that the persons adopting it would settle in America more comfortably to themselves, and more beneficial to their interest, than if they were to go out as insulated, unconnected individuals.

The next most adviseable plan for an Englishman would be, if he does not mean to follow trade, to go where land is cheap and fertile: where it is in a progress of improvement, and if possible in the neighbourhood of a few English, whose society, even in America, is interesting to an English settler, who cannot entirely relinquish the *memoria temporis acti*.

Nor is the article of climate unimportant. It will be wished, we conceive, that any sudden or violent change should, if possible, be avoided, and *ceteris paribus*, that a new-comer should be exposed to greater excess of heat or cold, beyond what he has been accustomed to bear, than the difference in point of natural situation between the two countries must inevitably produce. The United States contain so many varieties of climate, that there is great room for choice in this respect; but we think there will be little doubt with an Englishman about the propriety of avoiding in this article the long winters of New-Hampshire and Massachusetts, and the parching summers of a part of Georgia and the Carolinas. A perfect similarity is neither necessary nor possible, and the human constitution easily and speedily adapts itself to slight variations.

With these preliminary observations in view, let us examine the inducements which the respective States of America present to a British emigrant.

The southern States of Georgia and North and South-Carolina seem at present quite out of the question, at least they are not so convenient to an European, from the extreme heat of the climate, and the prevalence of the negroe slavery. The upper part of Georgia, and part of the Carolinas, may admit of exceptions; many have emigrated there, and many continue to do so with advantage to themselves and families.

The long continued cold of New-Hampshire and Massachusetts, including Vermont and the province of Maine, appears highly, though not perhaps equally objectionable. A man who has been used to a laborious active life, who is proud of independence, who wishes to shun the haunts of folly and vice, who would prefer living among a hardy race of independent farmers to the polished society of large cities, who wishes for honest hospitality instead of polished sycophancy, such a man will find in the New-England States an ample requital for a hard winter. To many, however, it will seem a most unpleasant circumstance, that so small a portion of the year is afforded by nature to the farmer, wherein to provide sustenance for the remaining part.

In the north-eastern States, viz. New-Hampshire and Massachusetts, Connecticut, &c. property is much divided,* farms are small, and good land in general dear; hence purchases are not easily made here, with the same prospect of future increase in value, which many of the other States afford. Add to this, that these parts of the American continent do themselves furnish yearly a very considerable number of emigrants to the middle and western States; they are "the northern hive" of this country. And the same reasons that operate upon the natives to emigrate from thence will be reasons also against an emigration thither.

The States of Rhode-Island, Jersey, Delaware, New-York, Pennsylvania, Maryland and Virginia, with the settlements on the western waters, have all of them claims to consideration on the present occasion.

Rhode-Island in point of climate and productions, as well as in appearance, is perhaps the most similar to Great-Britain of any State in the Union. The winters are somewhat longer and more severe, the summers perhaps a little warmer; but it participates with Great-Britain in some measure in the defects

* Connecticut contains at least sixty-two persons per square mile.

of climate, being from its situation subject to a moiſter atmosphere,* than many of the other States. The ſoil of Rhode-Iſland alſo is too much improved, and the land too much divided to admit of any large contiguous purchaſes as a ſpeculation, though ſingle farms at a rate comparatively moderate might be procured here. This, however, is owing to a decay of trade in this part of America, and to the inhabitants themſelves, quitting their ſituations for the proſpect of a more advantageous trade. It is rather adapted for a grazing than a corn country; ſcantily timbered, comparatively plentiful in milk, butter, and cheeſe; but not abounding in what the Americans term good or rich land. The diviſion of property, however, and its preſent tendency rather to decreaſe than increaſe in value, renders it ineligible for new ſettlers.

The climate of New-Jerſey, were there no other objections, is unpleasant to Europeans, particularly in the ſummer ſeaſon, from its eaſtern ſituation, the many ſwamps it contains, and the quantity of ſea coaſt in proportion to its extent. Muſquetoes and agues are more troubleſome in this than in many of the other northern or even middle States; and in the more eligible parts of New-Jerſey, property is too much divided, and too dear to promiſe ſucceſs to an eſta bliſhment, ſuch as we have alluded to; many valuable purchaſes may, however, be made in this State.

The ſame remarks will in a great degree apply to the State of Delaware, to which alſo there is a farther objection ariſing from the illiberality of the religious teſt law, contained in its conſtitution; not to mention the preſent prevalence of negroe ſlavery in that portion of the continent.

The State of New-York ſeems increaſing as rapidly in every circumſtance of proſperity as any other State in the Union, Pennſylvania excepted. The city of New-York ranks next to Philadelphia as a place of trade, and the back parts of the State afford, at no very dear price, immenſe tracts of the richeſt land. Neither is the climate in general ſo different from that of Great-Britain, as to conſtitute any formidable objection to Britiſh ſettlers. Its extremes of heat and cold are greater than in England, but in ſome parts a little more warmth would be no diſadvantage; for although the numerous tribes of American

* This obſervation is applicable to the vicinity of New-York alſo, where they find that wood intended for uſe in the ſouthern climates, cannot be ſufficiently ſeaſoned. In Pennſylvania it may. Indeed this remark will evidently apply to the whole northern ſea coaſt of America.

apples are to be found here in great perfection, the peach, it is said, does not perfectly ripen at Albany.

Beyond comparison, the most fertile part of this State is the Genessee country ; which, since the present war with the Indians, has attracted a great number of the New-England emigrants, who a year or two ago were induced to travel to the western frontier of the Ohio, in search of cheaper and better land than could be found in their own country. Indeed, there does not appear to be much difference in the kind or quality of the soil, between the first rate land of the Genessee and the Kentucky territory : whatever difference there is, may most probably be attributed to the greater warmth of the climate in the last mentioned part of America. If the mere circumstance of richness of soil therefore were to determine emigration, a New-England emigrant might reasonably stop in the Genessee country, without taking so long a journey as many of his countrymen have heretofore done.

To this part of the State, however, rich and fertile as it is, there are serious and formidable objections to many European settlers. The difficulty of procuring servants in husbandry, or, indeed, of any other kind, is very great : for as the land is but lately begun to be settled, the inhabitants, therefore, consist at present almost wholly of the class of first settlers, who depend chiefly on the labour of themselves and their families for support ; these, therefore, will be the only class of European settlers, labourers excepted, whom this part of the State would suit, and perhaps few parts are better adapted to a man whose family and connections would manage from one to five hundred acres of land. The superfluous produce of the Genessee lands will be sent either to Philadelphia or New-York, by the way of Albany. The conveyance will be troublesome and expensive to both places. That part of the Genessee country, which is nearest to the Susquehannah and the Delaware, will find vent for its produce at Philadelphia. This city will also attract the produce of a great part of the Genessee which from mere situation would seem more in the vicinity of New-York market, in consequence of the greater exertions making by the State of Pennsylvania to facilitate the carriage of commodities by means of new roads and canals, and the improvement of river navigation. It is evident from hence, as indeed it is from a simple inspection of the map, that the interior parts of Pennsylvania, in the vicinity of the Susquehannah, where the land for the most part is extremely fine, have very considerable

advantages over the most advantageous part of the Genessee tract, in the facility of transporting produce to market; the produce of the interior of Pennsylvania will therefore in all probability come first and cheapest to market. The present price of lands in the Genessee is nearly the same as in the rich parts of Pennsylvania, a hundred and fifty miles nearer to Philadelphia.

It is another unpleasant circumstance attending the Genessee country, that it forms the frontier to the Indians, who navigate the lakes along the whole tract: indeed many tracts in the Genessee territory itself are reserved by the Indians. At present they are friendly, nor is there much fear of a change; and should they become otherwise, they will be ultimately subdued; but the state of intermediate contest on such an occasion would ill suit the habits and inclinations of a peaceable European. Along the Mohawk river, the lands are rich and heavily timbered, and sell at present at a price not superior to the comparative advantages they present; but they are liable to many of the objections which may be made to the Genessee country.

It seems evident from these circumstances, that this country, which in other respects is the most eligible part of New-York State for many purposes of a new settler, has numerous disadvantages attending it; disadvantages which an American emigrant, from the thick settled states of New-England, would regard as trifling, but which, we conceive, will appear in a more formidable light to Europeans,

Very few objections can be made to the State of Pennsylvania. In point of climate, the difference between this part of the American continent and Great-Britain is not only very supportable, but perhaps in favour of the former, even to British feelings, especially in the northern and north-western part of the State. The summers are somewhat warmer and the winters colder than at London, but the general state of the air is more dry, more pleasant, and perhaps equally, if not more healthy. The central situation of this state with respect to the others, the prosperous state of its treasury, the numerous projected improvements in roads and canals, the possession of the largest and most flourishing city of America, and the superior proportion not only of imports and exports, but particularly of emigrants of every class that come to the port of Philadelphia, altogether make it probable, that Pennsylvania may fairly be regarded as the most flourishing State of the Union,

In a general view, Pennsylvania is preferable to New-York, because the climate is more dry,* and therefore more favourable to health, somewhat warmer, and therefore more favourable to vegetation in the former than in the latter State. In Pennsylvania, the government is more intent upon those public improvements that will force population and the speedy rise of lands, its revenues are more productive, and its treasury richer. In all other circumstances, Pennsylvania is at least equal to New-York, and in those enumerated, it has undoubtedly the preference. But we are not to seek in the south-eastern line of this State, either for large tracts of good or cheap land. As you approach the coast, property is divided, the land is barren, and the prices high. Neither is the climate in the south-eastern line of Pennsylvania for two hundred or two hundred and fifty miles, from the sea, so pleasant or so favourable to health or to vegetation as in the more northern and north-western parts of the State. Thus, in Philadelphia during the two last winters, the snows repeatedly appeared and disappeared; frosts succeeded to thaws, and the roots of the grain were left exposed to the severity of the cold. This inconvenience is more frequently experienced by the farmer in the part of Pennsylvania approaching to Maryland, and often proves a very serious inconvenience. While in the northern parts of Northumberland, Luzerne, and Northampton counties, the snow, when it once falls in a quantity, generally remains through the winter, producing more settled weather, and protecting the crops underneath.

Moreover, the largest unoccupied tracts of land, of course the cheapest, and beyond comparison the richest lands in this State, are to be found in the northern parts of the counties just mentioned, and of Allegany county; that is, generally speaking, north of latitude 41°.

With respect to Maryland and Virginia, objections may be made relative to slave-labour in particular. These States are likewise unpleasantly warm in the summer season to an English constitution, particularly the former; the impossibility of procuring any servants but negroe slaves, is an objection almost insuperable to a generous mind. Add to this, that Philadelphia is at present a better market for produce than Baltimore, particu-

* This holds almost throughout the whole extent of the two States; from the more inland situation of Pennsylvania, both with respect to the Atlantic sea, and the lakes.

larly for wheat, which usually sells a shilling higher at Philadelphia than at the port just mentioned, which however is in a very rapid state of improvement.

The federal city, recently laid out between the forks of the Potomack, will, however, give a considerable increased and increasing value to the country round it; and the future residence of Congress there, will, in time, make Washington city what New-York and Philadelphia are now, although the ports of Alexandria, Baltimore and Annapolis will long be competitors of great importance. There can be no doubt but persons may find and settle upon plantations in the neighbourhood of Washington city, sufficiently extensive to occupy a moderate capital, and to which there will be a yearly accession of value, independent of their own exertions, whatever the present price of lands may be. But still, the evil consequences of slave-labour at present remain; and whether it be owing to one, or to both of these causes combined, there is certainly a want of individual and national energy, in several of the southern states, which we do not find in the others: the stile of farming is more slovenly, the individuals are more idle and dissipated, and the progress of public improvements in general more slow than in the states on the northern side. There can be no doubt but the climate contributes something to this indolence of disposition; but where labour is confined to slaves, who do not benefit in proportion to their industry, and where the white inhabitant regards himself as a different and superior being, the general state of improvement must be affected by such opinions adopted in theory, and pursued in practice.

Hence, whatever may be the case as to particular spots, the gradual accession of value to landed property, from the operation of constant and regular causes, neither is, nor can be so great in countries of this description, as in others where the climate admits and requires exertion, and where it is thought no disgrace for a white man to labour.

It is presumed that the gradual accession of value to landed property, of which we have just spoken, will accrue more certainly, more speedily, and to a larger amount in the States of Pennsylvania, New-York, and Kentucky, than in either of the remaining States, on account of the present cheapness of good land, and on account of the great resort of European emigrants.

Good lands can be procured in New-York or Pennsylvania, in favourable situations, at from three half crowns to half a guinea an acre, and a capital employed in the purchase of such

lands will much sooner be doubled, than if the original price had been two or three pounds sterling per acre. An accession of three half crowns per acre, additional value to the former description, will produce a duplication of the capital employed; while an additional value of three half-crowns per acre to lands of the latter description, will produce about fifteen or sixteen per cent only. Moreover, five shillings or seven shillings and sixpence additional value is much more easily given to land of the first kind, and when given is more visible, more evident at first sight, than in the other case; and farther, land of this description must necessarily entice persons of small property, and derive consequent value from new settlers, even though value should not be given, by the gradual population of the country itself. It is clear also, that other causes must give a great advantage to the middle States, and render them for some years eligible situations for the employment of time and trouble, as well as capital. Of the two, perhaps, the preference should be given to Pennsylvania, for the reasons already mentioned; and also, because the current of improvement is beyond comparison more rapid in this than in New-York State; but in both these States, emigrants easily find plenty of land, rich, cheap, well watered, within the reach of navigation, under a good government and in a favourable climate.

With respect to Kentucky, in point of soil and climate, it certainly has the preference to any State in the Union. Nature has given to the regions of this fair country a fertility so astonishing, that to believe it, ocular demonstration becomes necessary. To this advantage we may add, that of the number of European settlers that have emigrated, and which continue to emigrate thither, and the consequent rapid state of improvement that has followed. Lands in and near the towns in this state must continue to increase in their value, and many purchases may now be made in the new townships with very great advantage to a settler; some difficulties there undoubtedly are, and such must naturally be expected in a newly-settled country.

Labourers are scarce, few if any can be hired but slaves, who are let out by their owners. But a great portion of the present inhabitants, like those of the Genessee country in New-York, cultivate the greater part of their own lands and live on the produce: this must be the case with those that will not have any thing to do with slaves: but this difficulty is not peculiar to Kentucky, it is common to all newly-settled countries. Another difficulty an European has to encounter in settling in Kentucky, is the great distance he has to travel after landing in America;

but this will operate as a difficulty only to some individuals. The man whose mind has gained strength sufficient to bid farewell to European luxuries, or who has been habituated to a life secluded from capital towns, will find little difficulty in this journey.

The routes from the different Atlantic States to this country are various, as may be supposed. From the northern States it is through the upper parts of Pennsylvania to Pittsburgh, and then down the river Ohio. The distance from Philadelphia to Pittsburgh is nearly three hundred miles; from Lancaster about two hundred and thirty. The rout through Redstone and by Pittsburgh, both from Maryland and Virginia, is the most eligible, provided much baggage is carried, except going from the southern and back counties of Virginia; then the best and most expeditious way is through the wilderness. From Baltimore, passing Old Town upon the Potomack, and by Cumberland fort; Braddock's road, to Redstone Old Fort on the Monongehala, is about two hundred and forty miles; and from Alexandria to the same place, by Winchester Old Town, and then the same route across the mountain, is about two hundred and twenty miles. This last must be the most eligible for all Europeans who may wish to travel to this country, as the distance by land is shorter, the roads better, and the accommodations good; *i. e.* they are very good to Old Town, which is one hundred and forty miles from Alexandria, and from thence to Redstone comfortable, and plentifully supplied with provisions of all sorts; the road over the mountain is rather rough, but no where, in the least difficult to pass.

Travellers or emigrants take different methods of transporting their baggage, goods or furniture, from the places they may be at to the Ohio, according to circumstances, or their object in coming to the country. If a man is travelling only for curiosity, or has no family or goods to remove, his best way will be to purchase horses, and take his route through the wilderness; but provided he has a family, or goods of any sort to remove, his best way, then, will be to purchase a waggon and team of horses to carry his property to Redstone Old Fort, or to Pittsburgh, according as he may come from the northern or southern states. A good waggon will cost, at Philadelphia, about ten pounds, reckoning everything in sterling money, for greater convenience, and the horses about twelve pounds each; they will cost something more both at Baltimore and at Alexandria. The waggon may be covered with canvas, and, if the choice of the people, they may sleep

in it at nights with the greatest safety. But if this mode should be disliked, there are inns of accommodation the whole distance on the different roads. To allow the horses a plenty of hay and corn will cost about one shilling *per diem* each horse, supposing forrage to be purchased in the most economical manner; *i. e.* of the farmers, from time to time as wanted, and not of innkeepers, who must have their profits. The provisions for the family may be purchased in the same manner; and by having two or three camp kittles, and stopping every evening when the weather is fine upon the brink of some rivulet, and kindling a fire, food may be soon dressed. There is no impediment to these kind of things, it is common, and may be done with the greatest security; and persons who wish to avoid expense, as much as possible, will adopt this plan. True, the charges at inns on those roads are remarkably reasonable, and the accommodations very good; but we have mentioned those particulars, as there are many unfortunate people who emigrate from Europe, to whom the saving of every shilling is an object; and this manner of journeying is so far from being disagreeable, that in a fine season it is extremely pleasant. To persons who have always been resident in a town, and enjoyed uninterruptedly the luxuries of life, it may appear strange and novel, but to persons habituated to a country life, even in England, there will not appear any thing hard or degrading.

Provisions in those countries through which you travel are very cheap; beef, mutton and pork, are something less than two pence per pound; dunghill fowls are from four pence to six pence each; ducks eight pence; geese and turkies one shilling and three pence; butter three pence per pound; cheese there is very little good until you arrive in Kentucky; flour is about twelve shillings and six pence per hundred weight.

The best way is to carry tea and coffee from the place they may set out at, if it is wished for; good green tea there will be from four shillings and six-pence to six shillings per pound; fouchong from three shillings to five shillings; coffee will cost from one shilling and three-pence to one shilling and six-pence per lb. loaf sugar from seven-pence halfpenny to ten-pence halfpenny. But it is needless carrying much sugar, for as the back country is approached, the maple sugar is in abundance, and may be bought from three-pence to six-pence per pound. Such are the expenses to be incurred in travelling to this country by Redstone and Pittsburgh.

The distance which one of those waggons may travel one day with another is little short of twenty miles; so that it will be a journey from Alexandria to Redstone Old Fort of eleven or twelve days, from Baltimore a day or two longer, and from Philadelphia to Pittsburgh, we should suppose it would require nearly twenty days, as the roads are not so good as from the two former places.

From these prices, the expense of removing a family from either of the sea ports to the Ohio may be computed with tolerable exactness.

The best time for setting out for this country from any of the Atlantic ports, is the latter end of either September or April. The autumn is perhaps the most eligible of the two; as it is probable, that the roads across the mountain will be drier, and provisions and forage more plentiful and cheap than in the spring.

If this mode should not suit the convenience of the party, by reason of their not wanting a waggon or horses when they arrive in this country, they may have their goods carried out to Redstone Old Fort from Alexandria for twelve shillings per hundred weight, and in like proportion from Baltimore and Philadelphia.

At Redstone Old Fort, or Pittsburgh, they can either buy a boat, which will cost them about five shillings per ton, or freight their goods to Kentucky for about one shilling per hundred weight. There is no regular business of this sort; but as there are always boats coming down the river, one shilling per hundred weight is the common charge for freight. But more frequently, when there is boat room to spare, it is given to such as are not able to purchase a boat, or have not a knowledge of the navigation. However, that is a business which requires no skill, and there are always numbers of people coming down, who will readily conduct a boat for the sake of a passage.

The distance from Philadelphia* by land to Kentucky is between seven and eight hundred miles; from Baltimore nearly

* The distance in the settled parts only can be computed with any degree of exactitude; but from the best information that can be collected, from the rapids of the Ohio to Santa Fe is about one thousand miles, and from thence to the city of Mexico about one thousand five hundred.

The computed distance between New-Orleans and Mexico is something short of two thousand miles, and about the same to Santa Fe.

seven hundred; nearly six hundred from Alexandria; and upwards of five hundred from Richmond. The roads and accommodations are tolerably good to the borders of the wilderness; through which it is hardly possible for a carriage to pass; great part of the way being over high and steep hills, upon the banks of the rivers and along defiles, which in some places seem to threaten you at every step with danger.* This is the only route the people coming from the upper parts of Virginia and North-Carolina can take at present to get into the country, the gap of Cumberland mountain being the only place it can be passed without the greatest difficulty. The opening of the Tennessee will afford a convenient communication with the Mississippi. The wilderness, which was formerly two hundred miles through without a single habitation, is reduced from the settlement of Powell's valley to nearly one-half of that distance; and it is to be expected, that in a few years more, the remainder of the distance will afford settlements for the accommodation of people travelling that route, when a good road may be made quite to Kentucky. The canals which are cutting on the Potomack, and the removal of the obstructions in Cheat river, will render the passage from Alexandria, or the federal city, to the Ohio, both cheap and easy.

Upon the arrival of emigrants in the country, they generally take a view of that part in which it is their object to settle, and according to their circumstances or calling, fix upon such a situation as many appear eligible for their business. But as the greater proportion of the emigrants who settle in Kentucky are husbandmen, we shall only take notice of their manner of proceeding and settling a farm. Land is to be purchased in every part of the country: the prices are various according to the improvements there may be upon it, its quality, and local situation; the general price of land, with some improvements, in the neighbourhood of villages, from twelve to fifteen shillings per acre. Plantations, with orchards and other improvements, may be purchased from twenty to twenty-five shillings per acre; good land without improvements, may be purchased from one shilling and six pence to eight shillings per ditto, which price will be according to its rate or quality and situation.

We have noticed only what may be termed settled country; we apprehend no European will be hardy enough to form a

* This road has been considerably improved, and a post now passes weekly through it from Philadelphia to Kentucky.

settlement in a wilderness; this will be left for the Americans, who, no doubt, from habit, are best qualified for that sort of business. Indeed, there are a number of people who have so long been in the custom of removing farther and farther back as the country becomes settled, for the sake of hunting, and what they call range for their cattle, which is that of feeding upon the natural grass, that they seem unqualified for any other kind of life. This is favourable to the settling a wild and infant country; and no doubt this disposition will last, with some, as long as there is left a wilderness in America. It is however certain, that this is advantageous to society, which will be bettered and not hindered by such peculiar habits, so long as they have new countries to people; for this adventurous spirit tends to accelerate the propagation of domestic animals of every sort.

Persons of moderate fortune, upon taking possession of the land they intend to form into a plantation, will, doubtless, procure such a stock as their circumstances will admit, and the extent of their object requires; but let us suppose an industrious man already provided with the necessary tools for his agricultural employment, and a little money to buy stock. In such a situation, after building a log-house, which will cost him little more than his labour,* he will procure some dunghill fowls, a cow, and a breeding sow.

These animals are very prolific in this climate and soil; and it is not a sanguine calculation to suppose the sow will have eight or ten pigs at each litter; by which means the family will have pork sufficient for the next year, and the year after they may barter bacon for beef and mutton, which we will conclude their circumstances have not permitted them as yet to purchase, though both may be easily procured at a moderate price. His labour will have provided him with corn before this time, and in the extension of his plantation, and the increase of his cow and hogs, his difficulties will be over. The increasing ratio of stock is prodigious, where provision for them costs so little as it does here, and where the fertility of the soil is so won-

* A log-house is very soon erected, and in consequence of the friendly disposition which exists among these hospitable people, every neighbour will come to the assistance of each other upon occasions of emergency. Sometimes they are built of round logs entirely, covered with rived ash shingles, and the interstices stopped with clay, or lime and sand, to keep out the weather. A house of this sort may be made as comfortable and elegant as any other kind of building, and is therefore the most convenient, as it may be erected in such a manner as to answer the circumstances of all descriptions of persons.

derful, that it amply repays the labourer for his toil; if the large trees are not very numerous, and a large proportion of them the sugar maple, which is very common, they are an advantage to the settler; it is very likely from imperfect cultivation, that the ground will yield from fifty to sixty bushels of corn to the acre. The second crop will be more ample; and as the shade is removed by cutting the timber away, great part of the land will produce from seventy to one hundred bushels of corn from an acre. This will enable the farmer who has but a small capital to increase his wealth in a most rapid manner.* His cattle and hogs will find sufficient food in the woods, not only for them to subsist upon, but to fatten them. His cows want no provender the greatest part of the year, except cane and wild clover; but he may afford to feed them with corn the 2d year, if he finds it necessary. His garden, with little attendance, will produce him all the culinary roots and vegetables necessary for his table; and the prolific increase of his hogs and poultry will furnish him without fear of injuring his stock, with a plenty of animal food; and in three or four years his flock of cattle and sheep will prove sufficient to supply him with both beef and mutton, and he may continue his plan at the same time of increasing his flock of those useful animals. By the fourth year, provided he is industrious, he may have his plantation in sufficient good order to build a better house, which he can do either of stone, brick, or a framed wooden building, the principal articles of which will cost him little more than the labour of himself and domestics; and he may readily barter or sell some part of the superfluous productions of his farm, which it will by this time afford, and procure such things as he may stand in need of for the completion of his building. Apples, peaches, pears, &c. &c. he ought to plant when he finds a soil or eligible situation to place them in, as that will not hinder, or in any degree divert him from the object of his aggrandizement. A few years of industry will now make him a man of property, and insure his comfort and independence for the remnant of his life, and lay a firm foundation for the future opulence of his family. We have taken no notice of the game he might kill, as it is more a sacrifice of time to an industrious man than any real advantage.

The best proof of the truth of these remarks is the past progress of the settlement of this country, from dirty stations or forts, and smoky huts, into fertile fields, blushing orchards, plea-

* By wealth is meant the comforts of life.

pleasant gardens, luxuriant sugar groves, neat and commodious houses, rising villages, and trading towns. Ten years have produced a difference in the population and comforts of this country, which to be pourtrayed in just colours would appear marvellous. To have implicit faith or belief that such things have happened, it is first necessary to be a spectator of such events.

We have entered into these several minutiae in order to afford as clear a view as possible to the individual who wishes to depend on the farm for his support, of what part of the continent he is most likely to succeed, agreeable to the plan he may choose to mark out for himself; in doing this, we have aimed at but one object, viz. to convey information.

In those situations far from towns and seaports, and which may be considered as but one remove from the savage wilderness, the difficulties to an European settler, no doubt, appear greater than they really are, and the contrast of the inhabitants with those of European states is greater still; the American farmer has more simplicity and honesty—we more art and chicanery—they have more of nature, and we more of the world. Nature, indeed, formed our features and intellects very much alike, but while we have metamorphosed the one, and contaminated the other, they have retained and preserved the natural symbols of both.

While motives suitable to the situation of life direct the man who depends on the earth for support, what part of the States to fix his residence in; men who have to depend on their efforts in trade, or their exertions, in mechanics and manufactures, the fine arts, or what are termed in Europe the learned professions, must be directed by different circumstances. The mechanic and manufacturer, whether he is by the advantage of property enabled to begin business as a master, or being destitute of it, is necessitated to labour as a journeyman, must take up his residence in large cities or towns. With him the progress of arts and manufactures, the state of society, the price of provisions, &c. are the principal objects of inquiry. Lawyers and physicians, must likewise make these the places of their residence; for with respect to the former, whether his line of business is that of a conveyancer, a notary, or solicitor, no place of any other description can find him employ, as his whole support must be drawn from the commerce, or the vices and follies of mankind. With respect to the latter, dissipation alone, in a great measure,

renders them necessary. Philadelphia, New-York, Boston, Baltimore, Charleston, Georgia and some other towns of note, will of course be the only places to which emigrants of either of the above descriptions will proceed. In these towns the state of society is much the same as in the large towns of Great-Britain, such as Birmingham, Bristol, Liverpool, Manchester, &c.

New-York, for instance, is the perfect counterpart of Liverpool; the situation of the docks, the form of streets, the state of the public buildings, the inside as well as the outside of the houses, the manners, the amusements, the mode of living among the expensive part of the inhabitants, all these circumstances are as nearly alike in the towns last mentioned as possible. In all the American towns above noticed, there are theatres and assemblies; there are, in short, precisely what the larger and more opulent provincial towns of Great-Britain are. Hence also we may easily conceive, that European comforts and conveniencies are not scarce. In fact, we may find in Philadelphia or New-York, every article of that description usually kept in the shops in the English towns referred to, in equal plenty, but not, indeed, equally cheap. To the price of all articles of luxurious furniture, pictures, pier glasses, carpets, &c. add one-third to the English price, and you have the full American price. House rent is also much the same as in the places hitherto compared; if any thing, somewhat dearer in America for houses of the same size and convenience. The houses in the one set of towns as in the other, are built of brick and stone. In the country, houses of equal convenience are as cheap as in the country of Great-Britain.

Provisions, milk and butter excepted, at Philadelphia and southward, are a full third cheaper than in similar places of Great-Britain. Butter, in Boston and New-York, is cheaper than in Philadelphia, where it is from eleven-pence, to one shilling and three-pence per pound. Cheese about the same price as in England, but perhaps not so good. Fireing in the great towns very dear, a chord of hickory wood, eight feet by four feet, and four feet selling in Philadelphia and New-York, in the winter, at seven dollars. In the country it would be about one dollar and a half.

In the settled country, however, from fifteen to two hundred and fifty miles from the large towns, the state of society, and the style of living, is preferable to the country life of Great-Britain.

With respect to the federal city, or, as it is called, the city of Washington, though it may in time become the rival even of Philadelphia, we cannot but doubt the success of manufacturers and artists of any kind who should take up their residence there for some years to come, those in the building line and the manufacture of household furniture excepted.

Having thus briefly attempted to point out the most eligible situation for European settlers, it is necessary to attend to another question which may naturally be asked; and to which we shall aim to give as satisfactory a reply as possible.

WHAT CLASS OF EUROPEAN CITIZENS WILL FIND IT
THEIR INTEREST TO FIX THEIR RESIDENCE
IN THE UNITED STATES?

One remark, by way of answer, may be considered as general. America is not a place suited for the idle, the profligate, the debauchee, nor the dissipated of any class; it is far from a congenial soil for what is termed in Europe a man of pleasure. These poisonous and obnoxious animals in the form of man, will find but little encouragement in the United States; the minds of the federal Americans are not corrupted by European systems sufficiently to give a welcome to characters of this stamp, but, on the contrary, they are held in the detestation they merit. In America, the terms honour and pleasure have different meanings affixed to them than in England; a man can claim no honour from his birth or his riches in that country; integrity and ability are the only paths that can lead him to that goal. And with respect to pleasures, the great body of the Americans know of none, but what arise from the practice of virtue. Thus their pleasures strengthen the ties of society, and contrary to what are called by that name in England, add to the stock of human happiness, instead of increasing its misery and wretchedness.

While characters of the above description will not find any advantage in migrating to America, few virtuous and industrious persons will find themselves disappointed in their expectations of at least a comfortable provision in their own line of business, though in this respect some will have advantage over others.

Merchants, tradesmen, and shopkeepers will find most of the large towns in the different states eligible situations; in general, they afford good water carriage for goods of all kinds, and are well situated for an extensive connection with the back countries.

Men of this description, though it is not absolutely necessary, will yet find it their advantage to serve a kind of local apprenticeship, for whatever be the previous connections or circumstances which induce them to go thither, time is necessary to acquire a sufficient knowledge of the habits and manners of the people, of the characters and situation of those with whom they are to deal, of the channels of commerce, the articles of barter, and the other details of business, which nothing but actual residence and local investigation can supply. With this, no person of good character and recommendation, with credit on the old country, can fail to succeed in the new. Success, however, will be much accelerated by a knowledge of the German and French languages, in Pennsylvania and New-York States in particular. In Philadelphia every store-keeper has the name of his firm and trade written in German as well as English.

Master workmen in every manufacturing and mechanical art, except those of superfluous or luxurious kinds, with their journeymen and labourers, must succeed here. The freight, insurance, and other charges of a voyage of three thousand miles, and the duties laid there, operate greatly in favour of American fabrics. Manufactures by fire, water, and emigrating workmen, must succeed even in the most agricultural of their states, and will meet with every encouragement in the New-England and other states, whose lands are nearly full. A regard for the republican manners of the country, and justice to Europeans, render it a duty to warn the manufacturers of superfluous and luxurious articles, not to emigrate to the United States. Gold, silver, and other laces, embroidery, jewellery, rich silks and silk velvets, fine cambrics, fine lawns, fine muslins, and articles of that expensive nature, have few wearers there, and those who do wear them, have a predilection in favour of European and other foreign articles.

There can be no doubt of the success of a glass manufactory, a gunpowder manufactory, a manufactory of all the heavy kinds of iron work, such as castings from the ore, bar iron, pig iron, rolling mills, slitting mills, and the making of nails, and of every article in the shipping line: woollen, linen, except in the heavy and coarse articles, and cotton manufactures, are perhaps dubious, owing to the want of hands, though the latter has been attended to with success. We believe that no soap boiler, hatter, gunsmith, tallow chandler, white-smith and blacksmith, brass founder, wheelwright, cabinet maker, carpenter, mason, bricklayer, taylor, shoemaker, cooper, tanner, currier, maltster, brewer, distiller, sailmaker, ropemaker, printer and bookbinder, whether master or journey-

man, can miss of employment there. Even silversmiths and watchmakers will find the state of society not unfavourable to their trade. Of silversmiths, masters and journeymen, there are reckoned about four hundred in Philadelphia alone. It is impracticable to enumerate every trade; but in general, without fear of erring, we may conclude, that all those of common use are now, and will long continue to be in demand there. The wages of journeymen are considerably higher than in Europe, and the money of a working man will certainly go farther.

The profession of the law is not so different in any of the States in America, from what it is in England, as not to afford a fair chance of success to any lawyer from the old country, who will spend a couple of years in attaining the practice, and the knowledge peculiar to, and necessary for the particular state in which he wishes to act. The fees are much the same as in England. The reports of cases determined in England are authority, but not precedent. They have great weight, and are generally decisive, but they are open to observation, to animadversion, and contradiction. The law, however, is a fashionable, and therefore a full profession in America, and we doubt whether an English lawyer will, in general mend his pecuniary situation by removing there; the lawyers of great practice, who all act as attornies, get from five hundred to two thousand pounds currency a year. We believe the profits of none exceed three thousand pounds. German and French, if not absolutely necessary, are very convenient to an American lawyer.

The profession of physic is well filled in America, but there are many foreigners who practise: the profession we believe is open, but, unless in the case of a German or French practitioner among the inhabitants who speak English imperfectly, the American physicians have, and perhaps justly, the preference. Surgeons are not so experienced as in Europe, nor, indeed, do surgical cases so frequently occur. The poor are less exposed to accident and disease, and therefore hospital practice is not instructive there.

With respect to divinity, the States certainly are already in the possession of teachers, who, for ability, faithfulness, piety, and virtue, are inferior to none. Of this class of men in the United States, we find none of those idle, dissipated, debauched characters which European establishments foster and cherish. There are no lordly priests rolling in affluence,

preying on the vitals of the poor, and oppressing those they were appointed to instruct. There are none that can tyrannise over the conscience of man, and hurl the thunders of a spiritual inquisition round his head, for not believing non-sensical dogmas, or submitting to their tyrannic sway.—No, the ministers of the gospel in America claim no lordship over the church, but are what they ought to be, instructors and examples of the people; and as there are no tithes nor livings, independent of the people, throughout the States, but on the contrary, the salaries of the ministers are entirely dependent on them, and in general not very large, there can be few temptations to men to embrace the ministry from improper motives. Many divines of different denominations have, however, quitted Europe for America; and where character and ability have been blended, they have invariably succeeded. Certain it is, that where a man is ambitious of becoming useful in spreading the gospel, no part of the world seems better adapted to gratify his wishes; an extensive back country, where there are few or no ministers, and an extensive Indian mission, present themselves to his view, independent of settled towns and cities, where a variety of sentiments and increasing population are certainly favourable to the settlement of a number of ministers. Those divines who emigrate from Europe, will probably succeed best who blend with the ministerial character that of a school-master, a character much in request in every part of the American continent.

With respect to literary men, it is to be observed, that in America there is not as yet what may be called a class of society, to whom this denomination will apply; such, for instance, as is to be found in Great-Britain, and indeed, in most of the old countries of Europe. A class whose profession is literature, and among whom the branches of knowledge are divided and subdivided with great minuteness, each individual taking and pursuing his separate department. Literature in America is, in general, an amusement only, collateral to the occupation of the person who attends to it. In Europe, it is a trade, a means of livelihood.

Certainly the Americans are not inferior in abilities to the Europeans; they are comparatively an infant society, and their numbers are comparatively few; and yet old as Great-Britain is in experience, abounding in her establishments for the promotion of learning, pre-eminent in repu-

tation, and gigantic in her attainments of knowledge and science of all kinds, the stripping of the new world, has taught her war by Washington, and philosophy by Franklin. Rittenhouse ranks with the best British mathematicians and astronomers. European diplomatists have shrunk before the reasoning of Jefferson; and the latest and acutest of our political philosophers are more than suspected of being the disciples only of Paine and Barlow, whose knowledge is notoriously the produce of the American school—but though not in abilities, the Americans are inferior to Europeans in the opportunity of knowledge, their libraries are scanty, their collections are almost entirely of modern books; they do not contain the means of tracing the history of questions: this is a want which the literary people feel very much, and which it will take some years effectually to remedy, notwithstanding the exertions that have been made, and are making, to accomplish it; the convulsed state of Europe, and the increasing prosperity of America, will, however contribute rapidly to improve their situation in this respect.

There is another circumstance also which has hitherto tended to keep back the progress of letters with the Americans. The war brought on much individual, as well as national poverty; necessity therefore, as well as the habitual industry and frugality of the people, led every body to attend to commercial pursuits, and their attention was absorbed in the improvement rather of their pockets than of their minds. But a great change has taken place, and ere long a new generation will arise, and it is rising, who will be enabled by the exertions of their parents, to dispense with incessant labour—they will begin to feel the want of, and they will imbibe a taste for literature, philosophy, and the fine arts; the useful sciences will find their votaries as numerous and as successful in America as in Europe; even at present the literati of the old continent will easily find congenial society in most of the great towns of the United States.

From what has been said, it may be doubted whether a man of large income can pleasantly spend it in America. A large income is not, indeed, so easily spent there, as in Europe; there are not such variety, nor such expensive amusements; nor does an expensive style of living procure so much respect there as in Great-Britain.* As

* Mr. Cooper observes, he could not find on enquiry that the most expensive persons in Philadelphia and New-York, lived at an expense beyond two thousand pounds sterling a year.

we have before observed, it is not the place for a man of pleasure, in our acceptation of the word. A man may, however, enjoy all the social comforts of life as well as those of a more enlarged kind; he may likewise increase his fortune either by judicious purchases of land, or by the public funds, without burdening himself with the toils of the tradesman, or the hazard of the merchant.

Those who buy land on the expectation of re-selling it at an advanced price, must not, however, buy in the thickly-settled part of the country, for there land is nearly at the maximum price it will arrive at for many years: he must not buy large tracts, far from all present settlements, unless he can force the speedy settlement of them by his own connection and influence. If he can do that he may buy indeed, any where, using common prudence in chusing the situation: but if he cannot induce an emigration thither by his own exertions, he must buy where the current of population is evidently tending, but where it has not yet reached. Certainly, land speculations in America, prudently entered upon, are extremely profitable: made at random they are otherwise.* If these do not suit, part of the American stock pays above six per cent. per annum, and the deferred stock above seven.

The American debt is funded in three kinds of stock, viz. the three per cent. stock, the six per cent. stock, and the deferred stock; this latter bears no present interest, but interest at six per cent. will become payable upon it, from and after the first of January, 1801.

In the beginning of June, 1794, the prices of American stock were in London,

	<i>Per cent.</i>	<i>£.</i>	<i>s.</i>	<i>d.</i>
Six per cent. stock, ninety pounds per cent.				
thus paying an interest of - - - - -		6	13	4

Three per cent. fifty pounds per cent.—paying an interest of - - - - -		6	0	0
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Deferred stock fifty-seven pounds per cent. upon which, if compound interest be reckoned at five per cent. until 1801, the fifty-seven will amount to eighty pounds, which therefore will yield - - -		7	10	0
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* Purchasers in this country, and meaning to stay here, will not find it their interest, in general, to embark a portion of property so small as not to pay for an agent on the spot. In this case, it should be a joint concern. But so much caution is requisite to persons not going themselves to America, that we cannot recommend the investiture of a fortune there, unless the principal, or some of the principals, act upon personal knowledge.

Shares in the American bank, which has hitherto *£. s. d.* paid eight pounds per cent. at one hundred and six pounds per cent. paying an interest of - - - 6 15 9

The surplus revenue of the United States is about one million two hundred thousand dollars, or two hundred and seventy thousand pounds sterling per annum; this is laid out on the principle of a sinking fund, to discharge the debt.

But on the whole, it is certainly best for a man of middling fortune, that is, persons of from two hundred and fifty to five thousand pounds fortune, to become farmers. We do not know that large fortunes are to be made by farming, but assured we are, that a moderate fortune may as certainly, easily, and more pleasantly, produce a common average profit in that line than in any other.

A hundred and fifty acres of land, with a tolerable house and barn upon it, and sufficient land cleared, for a person immediately to begin as a farmer, may be purchased in many parts at four pounds currency an acre,* payable one-fifth, perhaps, down, and one-fifth every year, with interest. We doubt whether this is more profitable, than the purchase with the same money of a large quantity of unimproved land, if the settler chuse to encounter the difficulties of the first twelve months, which are difficulties to Englishmen only; to Americans they do not appear under that form.

The land thus purchased is a species of property that must of necessity receive an annual increase in value, from the natural population of the country, *besides that* which the industry of the proprietor may confer upon it; we think we speak within compass, when we say that an industrious cultivator, besides making a plentiful livelihood and good interest of his capital, will find his farm quadrupled in value at the end of ten years, if he bought it in any cheap part of the back country, which was at the time in the course of settling.

To persons with a family, the advantages are much on the side of farming; the value of the produce of America is much higher than in England, when the lightness of the taxes, and the cheapness and the fertility of the land are considered. Among farmers, there is not, as in great towns, a perpetual temptation to unnecessary expense, or a style of living above income; and a man who has lived in the ease and plenty of middle life, need not give his son a better or a more certain establishment at setting out in the world,

* Not quite fifty shillings sterling

than five hundred acres of land and five hundred pounds to begin with; and this, ten years hence, will easily be within the compass of men of moderate fortune, who begin their American career now.

Many things are daily presenting themselves, by which the profits of land will be greatly enhanced in the United States. They have hitherto imported a great part of their drink from abroad, viz. rum, brandy, gin, &c. but they find, by extending their breweries so far as to render these spirituous liquors in part unnecessary, that they will want above two millions of bushels of barley for the purpose, and large quantities of hops, besides having use for a further part of the immense quantities of fire-wood and coal, with which their country abounds. They have also obtained the European cotton mill, by means of which, and a few of their innumerable mill seats, the owners of lands, in the six southern States, will be called upon to supply great quantities of cotton. The movements of a mill for spinning flax, hemp, and combed wool, have also been constructed there, by which the farmers, throughout the Union, will be called upon to supply further quantities of flax and hemp, and to encrease their sheep. The rolling mill for iron and other metals, and the tilt hammer for all large iron work, have been lately brought into extensive use, and will, no doubt, be erected in all the States. But the detail of water works, and mechanisin, which may be introduced into a country, that has, moderately speaking, ten thousand, and probably nearer twenty thousand mill seats, would be endless.

The term "farmer" is not synonymous with the same word in England, where it means a tenant, holding of some lord, paying near seven-eighths of the produce in rent, tythes and taxes: an inferior rank in life, and occupied by persons of inferior manners and education. In America a farmer is a land-owner paying no rent, no tythes, and few taxes equal in rank to any other in the States, having a voice in the appointment of his legislators, and a fair chance, if he deserves it, of becoming one himself. In fact, nine-tenths of the legislators of America are farmers.

A man may buy three hundred acres of rich, but unimproved, land at present, in the well-settled part of the back country, for thirty shillings per acre, currency, payable by instalments. In the course of a summer he may, with a couple of men to help him, clear ground enough to maintain

some cattle through the winter, and may have a comfortable log-house built, which he may improve or enlarge at his leisure. To do this, to put one-third of the whole into an arable state, and to pay the first and second instalments, will cost him, with the wages of the men, the keep of himself and a moderate family for twelve months, and the necessary cattle and implements of husbandry to cultivate this quantity properly, about four hundred and fifty or five hundred pounds sterling.

The above is the price of prime land in very eligible situations, but purchases may be made much lower, and to much greater advantage, particularly in Kentucky and the western territory, where the population of the country is not so great. We have thus endeavoured to answer, in as brief and comprehensive manner as possible, the leading question which an emigrator will be inclined to put: there are others which, though not of equal importance, are not without their weight, as

What is the state of politics in America?—Is the Commonwealth of the United States likely to prove durable.

With respect to the state of politics in America they have among them a few suspected royalists, exclusive of some Englishmen settled in the great towns, whom the Americans regard as unreasonably prejudiced against their government, and infected with a kind of *maladie du pays*.

The rest of the Americans are republicans, but of two classes: the one leaning to an extension rather than a limitation of the powers of the legislative and executive government; or, in other words, rather leaning to British than to French politics; inclining to introduce and extend the funding, the manufacturing, and the commercial systems: In this class rank almost all the executive officers of government, with the President at their head; the majority of the members of the senates, and the greatest part of the opulent merchants of the large towns: this party is denominated the Federalists, partly because they were the chief introducers and supporters of the present federal government, and the constitution of 1787; and partly from the very ingenious series of letters in favour of that constitution by Mr. Hamilton, termed "The Federalist."

The other party are called, "Anti-federalists;" not because they are adverse to a federal government, or wish, like the French, for a republic, one and indivisible, but in contradiction rather to the denomination of the other class. The

Anti-federalists, at the time when the present American constitution was in agitation, were hostile to the extensive powers given to government; and wished for more frequent returns to the people, of the authority they were to delegate to their trustees in office. This party objects to the salaries given to the officers of government as too large, to the state and distance assumed by some among them: Not even excluding the President Washington, whose manners and mode of living, cold, reserved and ceremonious, *as is said*, have tended in some degree to counteract the effects of his great abilities and eminent services. The Anti-federalists also rather lean to the French theory, though not to the French practice of politics; and they are averse to what they deem the monopolizing spirit, and insulting arrogance of superiority in England. This spirit of animosity against Great-Britain has been prodigiously increased by the part she is supposed to have taken in fomenting the Indian war, in exciting the hostilities of the Algerines, in seizing the ships and obstructing the commerce of the American merchants, in refusing or neglecting to give up the posts upon the lakes, or to make reparation for stolen negroes. The conduct of the British Court has certainly given strength to the Anti-federal party, among whom may now be ranked the majority of the people, and the majority of the houses of representatives.

It will be easy to conjecture from the preceding account, that the Federalists are the *ins* and the Anti-federalists the *outs* of the American government; and this is in a great degree, but not universally true.

With respect to the stability of the American Commonwealth, there is great probability that its duration will be longer than any empire that has hitherto existed: for it is a truth universally admitted, that all the advantages which ever attended any of the monarchies of the old world, all center in the new; together with many others, which they never enjoyed. The four great empires, and the dominions of Charlemagne and the Turks, all rose by conquests, none by the arts of peace. On the contrary, the territory of the United States has been planted and reared by a union of liberty, good conduct, and all the comforts of domestic virtue.

All the great monarchies were formed by the conquests of kingdoms, different in arts, manners, language, temper and religion, from the conquerors: so that the union, though in some cases very strong, was never the real and intimate connection of the same people; and this circumstance principally accelerated their ruin and was absolutely the cause of it in some. This will be very different in the Americans. They

will, in their greatest extent and population, be one of the same people; the same in language, religion, laws, manners, tempers and pursuits; for the small variation in some districts, owing to the settlement of Germans, is an exception so very slight, that in a few ages it will be unknown.

The Assyrian and Roman empires were of very slow growth, therefore lasted the longest; but still their encrease was by conquest, and the union of dissonant parts. The Persian and Macedonian monarchies were soon founded and presently overturned; the former not lasting so long as the Assyrian, nor a sixth of the duration of the Roman; and as to the Macedonians, it lasted but six years. This advantage of a slow growth is strong in favour of the Americans; the wonderful increase of their numbers is the natural effect of plenty of land, a good climate, and a mild and beneficent government, in which corruption and tyranny are wholly unknown. Some centuries are already past since their first settlement, and many more will pass before their power appears in its full splendor; but the quickness of a growth that is entirely natural will carry with it no marks of decay, being entirely different from monarchies founded by force of arms. The Roman empire perished by the hands of northern barbarians, whom the masters of the world disdained to conquer; it will not be so with the Americans, they spread gradually over the whole continent, insomuch that two hundred years hence, there probably will be nobody but themselves in the whole northern continent; from whence, therefore, should their Goths and Vandals come? Nor can they ever have any thing to fear from the south; first, because that country will never be populous, owing to the possession of mines; secondly, there are several nations and languages planted and remaining in it; thirdly, the most considerable part of it lies in the torrid zone, a region that never yet sent forth nations of conquerors.

In extent the habitable parts of North-America exceed that of any of the four empires, and consequently can feed and maintain a people much more numerous than the Assyrians or the Romans. The situation of the region is so advantageous that it leaves nothing to be wished for; it can have no neighbours from whom there is a possibility of attack or molestation; it will possess all the solid advantages of the Chinese empire without the fatal neighbourhood of the Tartars.

It will have further the singular felicity of all the advantages of an island, that is, a freedom from the attack of others, and too many difficulties, with too great a distance, to engage in enterprizes that heretofore proved the ruin of other monarchies.

The soil, the climate, production, and face of the continent, is formed by nature for a great, independent and permanent government : fill it with people who will of themselves, of course, possess all sorts of manufactures, and you will find it yielding every necessary and convenience of life. Such a vast tract of country, possessing such singular advantages, becoming inhabited by one people, speaking the same language, professing the same religion, and having the same manners ; attaining a population equal to that of the greatest empire ; sprung from an active and industrious nation, who have transfused into them their own industry and spirit, and seen them worthy of their original ; inhabiting a soil not dangerously fertile, nor a climate generally conducive to effeminacy ; accustomed to commerce : such a people must found a commonwealth as indissoluble as humanity will allow. Suffice it for England, that she will have been the origin of a commonwealth greater and more durable than any former monarchy ; that her language and her manners will flourish among a people who will one day become a splendid spectacle in the vast eye of the universe. This flattering idea of immortality no other nation can hope to attain.

And here let us make an observation, that should animate the authors in the English language with an ardour that cannot be infused into any other nation ; it is the pleasing idea of living among so great a people, through almost a perpetuity of time, and under almost an impossibility of becoming, like the Greek and Latin tongues, dead ; known only by the learned. Increasing time will bring increasing readers, until their names become repeated with pleasure by above an hundred millions of people !

Having endeavoured to answer what we conceive will be the leading inquiries of an European, who has an intention of removing from his native country to America, we shall proceed to offer such information, as from the plan laid down we had not the opportunity of introducing, or at least but slightly, into the preceding part of the work, or which we judged would be best deferred to the present period of it : in doing this, we shall endeavour to introduce our information with a special reference to that class of emigrators, whose va-

rious callings may induce them to settle in towns or cities; and to those who, engaged in rural economy, will take up their residence in the back country, or the western territory: many parts, however, will be applicable to both, for the farmer will in various cases find himself connected with the cities and towns; it is there he must seek markets for his stock, and it is from his labours the towns and cities must receive supplies.

The following tables will prove advantageous to men of every description, who have any connection with America, but particularly to an European settler.

A TABLE of the Value of sundry Coins, as they now pass
in Great-Britain and the United States.

NAMES of COINS	Sterling Money of Great-Bri- tain,	Pennsylva- nia, New- Jersey, De- laware, Maryland,	N. Hamp- shire, Mas- sachusetts, Rhode Is- land, Con. Vir- gina, &c.	New-York and North Carolina.	South-Ca- rolina, and Georgia.
	<i>l. s. d.</i>	<i>l. s. d.</i>	<i>l. s. d.</i>	<i>l. s. d.</i>	<i>l. s. d.</i>
English guineas - -	1 1 0	1 15 0	1 8 0	1 17 4	1 1 9 ¹
English half do. - -	0 10 6	0 17 6	0 14 0	0 18 8	0 10 10 ²
English Crowns - -	0 5 0	0 8 4	0 6 8	0 9 0	0 5 2
English half ditto -	0 2 6	0 4 2	0 3 4	0 4 6	0 2 7
English shillings - -	0 1 0	0 1 8	0 1 4	0 1 9 ¹	0 1 0
English six-pences -	0 0 6	0 0 10	0 0 8	0 0 10 ¹	0 0 6
French Louis-d'or -	1 6 0	1 14 6	1 7 6	1 16 0	1 1 5
French crowns - -	0 5 0	0 8 4	0 6 8	0 9 4	0 3 3
Spanish dollars - -	0 4 6	0 7 6	0 6 0	0 8 0	0 4 8
Johannes - - -	3 12 0	6 0 0	4 16 0	6 8 0	4 0 0
Half Johannes - - -	1 16 0	3 0 0	2 8 0	3 4 0	2 0 0
French pistoles - -	0 16 0	1 7 6	1 2 0	1 8 0	0 17 6
Spanish ditto - - -	0 16 6	1 8 0	1 2 0	1 9 0	0 18 0
Doubleloons - - -	3 6 0	5 12 6	4 8 0	5 16 0	3 10 0
Moidores - - -	1 7 0	2 5 0	1 16 0	2 8 0	1 8 0

METHOD OF REDUCING CURRENCY TO STERLING.

Currency in Pennsylvania, New-Jersey, Delaware, and Maryland, is reduced to sterling by multiplying by three and dividing by five, one hundred pounds sterling making at par one hundred and sixty-six pounds thirteen and eight-pence Pennsylvania currency. That is, a merchant, when exchange is at par, will give a draft on Pennsylvania for the above sum on receiving one hundred pounds sterling. At present a merchant in London will give more, and therefore it is advantageous to buy bills on America.

Currency in New-York, and North-Carolina is reduced to sterling by multiplying by nine and dividing by sixteen. Thus a shilling New-York currency is six-pence three farthings sterling.

Currency in New-Hampshire, Massachusetts, Rhode-Island, Virginia, and the western territory, is reduced to sterling by multiplying by three and dividing by four.

Currency in South-Carolina and Georgia is reduced to sterling by deducting one twenty-seventh.

A TABLE of the Value of the Gold Coins of the following Countries, as established by the act of Congress, passed Feb. 9th, 1793, viz.

Great-Britain and Portugal.					France, Spain, and the Dominions of Spain.				
Gr.	ts.	Dwt.	Dol.	Cts.	Gr.	Cts.	Dwt.	Dol.	Cts.
1	3	1	0	89	1	3	1	0	87
2	7	2	1	78	2	7	2	1	75
3	11	3	2	67	3	11	3	2	63
4	14	4	3	55	4	14	4	3	50
5	18	5	4	44	5	18	5	4	38
6	22	6	5	33	6	22	6	5	25
7	25	7	6	22	7	25	7	6	13
8	29	8	7	11	8	29	8	7	1
9	33	9	8	00	9	33	9	7	88
10	37	10	8	89	10	36	10	8	76
11	40	11	9	78	11	40	11	9	63
12	44	12	10	67	12	44	12	10	51
13	48	13	11	55	13	47	13	11	39
14	51	14	12	44	14	51	14	12	26
15	55	15	13	33	15	55	15	13	14
16	59	16	14	22	16	58	16	14	1
17	63	17	15	11	17	62	17	14	89
18	67	18	16	00	18	66	18	15	76
19	70	19	16	89	19	69	19	16	64
20	74	20	17	78	20	73	20	17	52
21	78	21	18	67	21	76	21	18	39
22	81	22	19	55	22	80	22	19	27
23	85	23	20	44	23	84	23	20	14
24	89	24	21	33	24	87	24	21	2

VALUE of Dollars in Sterling, reckoning the Dollar at 4s. 6d.

DOL.	L.	s.	DOL.	L.	s.	d.	DOL.	L.	s.	d.
100,000	=22,500	—	700	=157	10	—	10	=2	5	—
50,000	11,250	—	600	135	—	—	9	2	0	6
20,000	4,500	—	500	112	10	—	8	1	16	—
10,000	2,250	—	400	90	—	—	7	1	11	6
5,000	1,125	—	300	67	10	—	6	1	7	—
4,000	900	—	200	45	—	—	5	1	2	6
3,000	675	—	100	22	10	—	4	—	18	—
2,000	450	—	50	11	5	—	3	—	13	6
1,000	225	—	40	9	—	—	2	—	9	—
900	202	10	30	6	15	—	1	—	4	6
800	180	—	20	4	10	—				

A TABLE of the Value of CENTS in Pence,* as computed at the Banks of the United States and North-America,

Pence.	Cents.	Pence.	Cents.	Pence.	Cents.	Pence.	Cents.
1	1	24	27	47	52	70	78
2	2	25	28	48	53	71	79
3	3	26	29	49	54	72	80
4	4	27	30	50	55	73	81
5	5	28	31	51	57	74	82
6	7	29	32	52	58	75	83
7	8	30	33	53	59	76	84
8	9	31	34	54	60	77	85
9	10	32	35	55	61	78	87
10	11	33	37	56	62	79	88
11	12	34	38	57	63	80	89
12	13	35	39	58	64	81	90
13	14	36	40	59	65	82	91
14	15	37	41	60	67	83	92
15	17	38	42	61	68	84	93
16	18	39	43	62	69	85	94
17	19	40	44	63	70	86	95
18	20	41	45	64	71	87	97
19	21	42	47	65	72	88	98
20	22	43	48	66	73	89	99
21	23	44	49	67	74	90	100
22	24	45	50	68	75		
23	25	46	51	69	77		
16 of a dollar, $6\frac{1}{4}$ cents.		1-2	do.	50	do.		
1-8 do. $12\frac{1}{2}$ do.		1-2	a pistareen,	10	do.		
1-4 do. 25 do.		1	pistareen	20	do.		

* That is, pence in currency, wherein one penny currency is equal to three-fifths of a penny sterling.

A TABLE of the Value of Cents in Sterling Money.

	s.	d.	far.		s.	d.	far.
1 Cent equal to	0	0	2,16	51 Cents equal to	2	3	2,16
2	0	1	0,32	52	2	4	0,32
3	0	1	2,48	53	2	4	2,48
4	0	2	0,64	54	2	5	0,64
5	0	2	2,8	55	2	5	2,80
6	0	3	0,96	56	2	6	0,96
7	0	3	3,12	57	2	6	3,12
8	0	4	1,28	58	2	7	1,28
9	0	4	3,44	59	2	7	3,44
10	0	5	1,60	60	2	8	1,60
11	0	5	3,76	61	2	8	3,76
12	0	6	1,92	62	2	9	1,92
13	0	7	0,08	63	2	10	0,08
14	0	7	2,24	64	2	10	2,24
15	0	8	0,40	65	2	11	0,40
16	0	8	2,56	66	2	11	2,56
17	0	9	0,72	67	3	0	0,72
18	0	9	2,88	68	3	0	2,88
19	0	10	1,04	69	3	1	1,04
20	0	10	3,20	70	3	1	3,20
21	0	11	1,36	71	3	2	1,36
22	0	11	3,52	72	3	2	3,52
23	1	0	1,68	73	3	3	1,68
24	1	0	3,84	74	3	3	3,84
25	1	1	2,	75	3	4	2,
26	1	2	0,16	76	3	5	0,16
27	1	2	2,32	77	3	5	2,32
28	1	3	0,48	78	3	6	0,48
29	1	3	2,64	79	3	6	2,64
30	1	4	0,8	80	3	7	0,80
31	1	4	2,96	81	3	7	2,96
32	1	5	1,12	82	3	8	1,12
33	1	5	3,28	83	3	8	3,28
34	1	6	1,44	84	3	9	1,44
35	1	6	3,6	85	3	9	3,60
36	1	7	1,76	86	3	10	1,76
37	1	7	3,92	87	3	10	3,92
38	1	8	2,08	88	3	11	2,08
39	1	9	0,24	89	4	0	0,24
40	1	9	2,40	90	4	0	2,40
41	1	10	0,56	91	4	1	0,56
42	1	10	2,72	92	4	1	2,72
43	1	11	0,88	93	4	2	0,88
44	1	11	3,04	94	4	2	3,04
45	2	0	1,20	95	4	3	1,20
46	2	0	3,36	96	4	3	3,36
47	2	1	1,52	97	4	4	1,52
48	2	1	3,68	98	4	4	3,68
49	2	2	1,84	99	4	5	1,84
50	2	3	0,	100	4	6	

POSTAGE OF LETTERS THROUGHOUT THE UNITED STATES.

For the postage of any single letter to or from any place by land, not exceeding thirty miles, 6 cents; over thirty to sixty, 8 cents; over sixty to one hundred, 10 cents; over one hundred to one hundred and fifty, $12\frac{1}{2}$ cents; over one hundred and fifty to two hundred, 15 cents; over two hundred to two hundred and fifty, 17 cents; over two hundred and fifty to three hundred and fifty, 20 cents; over three hundred and fifty to four hundred and fifty, 22 cents; and from every place more than four hundred and fifty miles, 25 cents.

DUTIES

Payable by Law on all Goods, Wares and Merchandize, imported into the United States of America, after the last day of March 1795. The inward column exhibiting the rates of duties payable on those imported in ships or vessels of the United States; and the outward column the rates payable on the same if imported in foreign ships or vessels.

	If imported in	
	Amer. vessels.	For. vessels.
Arms, fire and side, not otherwise enumerated, or parts thereof	15 per cent. ad val.	$16\frac{1}{2}$
Apparatus, philosophical, specially imported for any seminary of learning	free	free
Ale, beer and porter, in casks or bottles	8 cents per gallon	$8\frac{4}{5}$
on value of the bottles	10 per cent. ad val.	11
Artificial flowers, feathers and other ornaments for women's head dresses	15 Ditto	$16\frac{1}{2}$
Aniseed	15 Ditto	$16\frac{1}{2}$
Articles of all kinds of the growth, product or manufacture of the United States, spirits excepted	free	free
Anchors	10 per cent. ad val.	11
Brass cannon, until the 22d day of May, 1785	free	free
—————after May 22, 1795	15 per cent. ad val.	$16\frac{1}{2}$
—————teutenague and wire	free	free
—————iron or steel locks, hinges, hoes, anvils and vices	10 per cent. ad val.	11
—————all other manufactures of brass,	15 Ditto	$16\frac{1}{2}$
Balls and ballams (see powders, pastes, &c.)	15 Ditto	$16\frac{1}{2}$
Beer, ale and porter in casks or bottles	8 cents per gallon	$8\frac{4}{5}$
on value of the bottles	10 per cent. ad val.	11
Bricks and tiles	15 Ditto	$16\frac{1}{2}$

	If imported in	
	Amer. vessels:	For. vessels.
Boots	75 cents per pair	82 $\frac{1}{2}$
Books blank	10 per cent. ad val.	11
Books of persons who come to reside in the United States	free	free
Buttons of every kind	15 per cent. ad val.	16 $\frac{1}{2}$
Buckles, shoe and knee	15 Ditto	16 $\frac{1}{2}$
Brushes	10 Ditto	11
Bullion	free	free
Burgundy wine	40 cents per gallon	44
Carriages, or parts of carriages	20 per cent. ad val.	22
Cards playing	25 cents per pack	27 $\frac{1}{2}$
— wool and cotton	50 cents per dozen	55
Cables and tarred cordage	180 cents per cwt.	198
Cabinet wares	15 per cent. ad val.	16 $\frac{1}{2}$
Caps, hats and bonnets of every kind	15 Ditto	16 $\frac{1}{2}$
Carpets and carpeting	15 Ditto	16 $\frac{1}{2}$
Cartridge paper	15 Ditto	16 $\frac{1}{2}$
Candles of tallow	2 cents per lb.	2 $\frac{1}{3}$
— of wax or spermaceti	6 Ditto	6 $\frac{3}{5}$
Champaign wine	40 cents per gallon	44
Capers	15 per cent. ad val.	16 $\frac{1}{2}$
Canes, walking sticks and whips	10 Ditto	11
Cambricks	10 Ditto	11
Cheese	7 cents per pound	7 $\frac{7}{10}$
China ware	15 per cent. ad val.	16 $\frac{1}{2}$
Cinnamon, cloves, currants & comfits	15 Ditto	16 $\frac{1}{2}$
Chintzes and coloured calicoes, or muslins, and all printed, stained, or coloured goods or manufactures of cotton, or of linen, or of both, or of which cotton or linen is the ma- terial of chief value	12 $\frac{1}{2}$ Ditto	13 $\frac{3}{4}$
Cocoa	4 cents per pound	4 $\frac{2}{3}$
Chocolate	3 Ditto	3 $\frac{3}{10}$
Clogs and golo shoes (see shoes)	15 cents per pair	16 $\frac{1}{2}$
Cordage, tarred	180 cents per cwt.	198
— and yarn untarred	225 Ditto	247 $\frac{1}{2}$
Cosmetics	15 per cent. ad val.	16 $\frac{1}{2}$
Coal	5 cents per bushel	5 $\frac{1}{2}$
Colours (see painters)	15 per cent. ad val.	16 $\frac{1}{2}$
Copper manufactures	15 Ditto	16 $\frac{1}{2}$
— in plates, pigs and bars	free	free
Compositions for the teeth or gums (see dentifrice)	15 per cent. ad val.	16 $\frac{1}{2}$
Coffee	5 cents per pound	5 $\frac{1}{2}$
Cotton	3 Ditto	3 $\frac{3}{10}$
Cotton or linen manufactures, or of both, or of which cotton or linen is		

	If imported in	
	Amer. vessels.	For. vessels.
the material of chief value, being printed, stained or coloured	12½ per cent. ad val.	13½
Cotton not printed, stained or coloured	10 Ditto	11
Clocks and watches, or parts of either	15 Ditto	16½
Coaches, chariots, phaetons, chairs, chaises, solos, or other carriages, or parts of either	20 Ditto	22
Clothing ready made	10 Ditto	11
Cloths, books, household furniture, and the tools or implements of the trade or profession of persons who come to reside in the United States	free	free
Cutlaries, until the 22d day of May, 1795	free	free
— or parts thereof, after the 22d day of May, 1795	15 per cent. ad val.	16½
Dates and figs	15 Ditto	16½
Dentifrice, powders, tinctures, pre- parations and compositions for the teeth or gums	15 Ditto	16½
Dolls, dressed and undressed, or parts thereof	15 Ditto	16½
Drugs, medicinal, except those com- monly used for dying	15 Ditto	16½
— and woods for dying	free	free
Earthen and stone wares	15 Ditto	16½
Essences (see powders, pastes, &c.)	15 Ditto	16½
Fans, or parts thereof	15 Ditto	16½
Fayal wine	20 cents per gallon	22
Fringes commonly used by upholster- ers, coachmakers, and saddlers	15 Ditto	16½
Floor cloths and mats, or parts of either	15 Ditto	16½
Fruits of all kinds	15 Ditto	16½
Furs of every kind undressed	free	free
Gals, black quart bottles	10 Ditto	11
— window glass	15 Ditto	16½
— all other glass, and manufactures thereof	20 Ditto	22
Glauber salts	200 cents per cwt.	220
Gauzes	10 per cent. ad val.	11
Geneva (see spirits)		
Ginger	15 Ditto	16½
Girandoles, or parts thereof	20 Ditto	22
Gloves and mittens of every kind	15 Ditto	16½
Gold, silver and plated ware	15 Ditto	16½
Gold and silver lace	15 Ditto	16½
Goods, wares, and merchandize, im- ported directly from China, or India, in ships or vessels not of the United		

	If imported in	
	Amer. vessels.	For. vessels.
States, except teas, China ware, and all other articles liable to higher rates of duties		per cent. ad val. 12 $\frac{1}{2}$
Goods, wares, and merchandize, in- tended to be re-exported to a fo- reign port or place in the same ship or vessel in which they shall be im- ported, and all articles of the growth, product or manufacture of the United States, spirits excepted	free	free
Goods, wares, and merchandize, not herein otherwise particularly enu- merated and described	10 per cent. ad val.	11
Glue	15 Ditto	16 $\frac{1}{2}$
Gun powder until the 22d day of May, 1795	free	free
— after the 22d day of May, 1795	10 Ditto	11
Hangers, or parts thereof	15 Ditto	16 $\frac{1}{2}$
Hair powder	15 Ditto	16 $\frac{1}{2}$
Hemp	100 cents per cwt.	11
Hides, raw	free	free
Household furniture of persons who come to reside in the United States	free	free
Implements of the trade or profession of persons who come to reside in the United States	free	free
Indigo	25 cents per pound	27 $\frac{1}{2}$
Iron wire	free	free
— steel or brass locks, hinges, hoes, anvils, and vices	10 per cent. ad val.	11
— cast, slit, or rolled, and all manu- factures of iron, steel, or brass, or of which either of these metals is the article of chief value, not being otherwise particularly enumerated	15 Ditto	16 $\frac{1}{2}$
Jewellery and paste work	15 Ditto	16 $\frac{1}{2}$
Lace of gold and silver	15 Ditto	16 $\frac{1}{2}$
Laces and lawns	10 Ditto	11
Laces, lines, fringes, tassels and trim- mings commonly used by uphol- sterers, coachmakers, and saddlers	15 Ditto	16 $\frac{1}{2}$
Lampblack	10 Ditto	11
Lapis calaminaris	free	free
Leather, tanned and tawed, and all manufactures of leather, or of which leather is the article of chief value, not otherwise particularly enume- rated	15 Ditto	16 $\frac{1}{2}$

	If imported in	
	Amer. vessels.	For. vessels.
Lead and musket ball, until the 22d day of May 1795	free	free
— after May 22d 1795	1 cent per pound	1 $\frac{1}{10}$
— all other manufactures of lead, or in which lead is the chief article	1 Ditto	1 $\frac{1}{10}$
Lemons and limes	15 per cent. ad. val.	16 $\frac{1}{2}$
Linen or cotton manufactures, or of both, or of which cotton or linen is the material of chief value, printed, stained, or coloured	12 $\frac{1}{2}$ Ditto	13 $\frac{1}{4}$
— not painted, stained, or coloured	10 Ditto	11
Lisbon and Oporto wines	25 cents per gallon	27 $\frac{1}{2}$
Looking-glasses	20 per cent. ad. val.	22
Manufactures of tin, pewter, and copper	15 Ditto	16 $\frac{1}{2}$
— of iron, steel, or brass, not otherwise particularly enumerated	15 Ditto	16 $\frac{1}{2}$
— of leather not otherwise particularly enumerated	15 per cent. ad. val.	16 $\frac{1}{2}$
— of lead not otherwise particularly enumerated	1 cent per pound	1 $\frac{1}{10}$
— of cotton or linen, or of both, printed, stained or coloured	12 $\frac{1}{2}$ per cent. ad val.	13 $\frac{1}{4}$
— of ditto, not printed, stained or coloured	10 Ditto	11
— of glass (see glass)		
— of tobacco (see snuff and tobacco)		
— of wood (see cabinet wares and wood)		
— of the United States, spirits excepted	free	free
Mats and floor cloths, or parts of either	15 per cent. ad val.	16 $\frac{1}{2}$
Malt	10 cents per bushel	11
Marble, slate and other stone, bricks, tiles, tables, mortars and other utensils of marble or slate, and generally all stone, and earthen ware	15 per cent. ad val.	16 $\frac{1}{2}$
Madeira wines (see wines)		
Malaga wine	20 cents per gallon	22
Mace	15 per cent. ad val.	16 $\frac{1}{2}$
Medicinal drugs, except those commonly used in dying	15 Ditto	16 $\frac{1}{2}$
Merchandize, goods and wares, imported directly from China or		

	If imported in	
	Amer. vessels.	For. vessels.
India, in ships or vessels not of the United States, except teas, China ware, and all other articles liable to higher rates of duties	per cent. ad val.	12 $\frac{1}{2}$
Merchandise, goods and wares, intended to be re-exported to a foreign port or place in the same ship or vessel in which they shall be imported—and all articles of the growth, product or manufacture of the United States, spirits excepted	free	free
Merchandise, goods and wares not herein otherwise particularly enumerated and described	10 per cent. ad val.	11
Mittens, and gloves of every kind	15 Ditto	16 $\frac{1}{2}$
Millenary ready made	15 Ditto	16 $\frac{1}{2}$
Molasses	3 cents per gallon	3 $\frac{3}{10}$
Muskets and firelocks with bayonets suited to the same, and musket-ball, until the 22d day of May 1795.	free	free
— or parts of either after the 22d day of May 1795	15 per cent. ad val.	16 $\frac{1}{2}$
Muskets and firelocks without bayonets or parts of either	15 Ditto	16 $\frac{1}{2}$
Mustard in flour	15 Ditto	16 $\frac{1}{2}$
Muslins and muslinets printed, stained or coloured	12 $\frac{1}{2}$ Ditto	13 $\frac{3}{4}$
— not printed, stained or coloured	10 Ditto	11
Nails	2 cents per pound	2 $\frac{1}{5}$
Nankeens	12 per cent. ad val.	13 $\frac{3}{4}$
Nutmegs	15 Ditto	10 $\frac{1}{2}$
Oranges	15 Ditto	16 $\frac{1}{2}$
Ointments, oils and odors (see powders, pastes, &c.)	15 Ditto	16 $\frac{1}{2}$
Olives	15 Ditto	16 $\frac{1}{2}$
Oil	15 Ditto	16 $\frac{1}{2}$
Oporto and Lisbon wine	15 cents per gallon	27 $\frac{1}{2}$
Paper hangings	15 per cent. ad val.	16 $\frac{1}{2}$
— writing and wrapping	10 Ditto	11
— sheathing and cartridge	15 Ditto	16 $\frac{1}{2}$
Painters colours, whether dry or ground in oil, except those commonly used in dying	15 Ditto	16 $\frac{1}{2}$
Pack thread and twine	400 cents per cwt.	449
Paste boards, parchment or vellum	10 per cent. ad. val.	11

	If imported in	
	Amer. vessels.	For. vessels.
Phætons, or parts thereof	20 per cent. ad val.	22
Plaster of Paris	free	free
Pewter manufactures	15 Ditto	16 $\frac{1}{2}$
—— old	free	free
Pepper	6 cents per pound	6 $\frac{3}{5}$
Perfumes	15 per cent. ad val.	16 $\frac{1}{2}$
Pistols until the 22d day of May 1795	free	free
—— or parts thereof after the 22d day of May 1795	15 per cent. ad val.	16 $\frac{1}{2}$
Pictures and Prints	10 Ditto	11
Pimento	4 cents per pound	4 $\frac{2}{5}$
Printing types	10 per cent. ad val.	11
Pickles of all sorts	15 Ditto	16 $\frac{1}{2}$
Printed, stained, or coloured goods or manufactures of cotton, or of linen, or of both	12 $\frac{1}{2}$ Ditto	13 $\frac{3}{4}$
Philosophical apparatus, specially imported for any seminary of learning	free	free
Porter, beer and ale in casks, or bottles	8 cents per gallon	8 $\frac{4}{5}$
—— on value of the bottles	10 per cent. ad val.	11
Powder, gun until the 22d day of May 1795	free	free
—— after the 22d day of May 1795	10 per cent. ad. val	11
Powders, pastes, balls, balsams, ointments, oils, waters, washes, tinctures, essences or other preparations or compositions commonly called sweet scents, odors, perfumes or cosmeticks—and all powders or preparations for the teeth or gums	15 Ditto	16 $\frac{1}{2}$
Plumbs and prunes	15 Ditto	16 $\frac{1}{2}$
Raisins	15 Ditto	16 $\frac{1}{2}$
Raw hides and skins	free	free
Rum (see spirits)		
Salt weighing more than fifty six pounds per bushel	12 cents per 56 lb.	13 $\frac{1}{5}$
—— weighing fifty-six pounds per bushel or less	12 cents per bushel	13 $\frac{1}{5}$
Stained, printed, or coloured goods or manufactures of cotton, or of linen, or of both	12 $\frac{1}{2}$ per cent. ad val.	13 $\frac{3}{4}$
Salt petre	free	free
Saint Lucar wines	30 cents per gallon	33
Starch	13 per cent. ad val.	16 $\frac{1}{2}$
Slate, stone, and stone ware	15 Ditto	16 $\frac{1}{2}$

	If imported in	
	Amer. vessels.	For. vessels.
Sail cloth	10 per cent. ad val.	11
Saddles, or parts thereof	10 Ditto	11
Sattins and other wrought filks	10 Ditto	11
Steel	100 cents per cwt.	110
Steel, iron or brass locks, hinges, hoes, anvils and vices	10 per cent. ad val.	11
— all other manufactures of steel	15 Ditto	16 $\frac{1}{2}$
Sheathing and cartridge paper	15 Ditto	16 $\frac{1}{2}$
Sherry wine	33 cents per gallon	36 $\frac{3}{10}$
Sea stores of ships or vessels	free	free
Spermaceti candles	6 cents per pound	6 $\frac{3}{5}$
Sweet scents (see powders, pastes, &c.)	15 per cent. ad val.	16 $\frac{1}{2}$
Spirits distilled in foreign countries, viz.		

From Grain—

First proof	28 cents per gallon	30 $\frac{4}{5}$
Second proof	29 Ditto	31 $\frac{9}{10}$
Third do.	31 Ditto	34 $\frac{1}{10}$
Fourth do.	34 Ditto	37 $\frac{2}{5}$
Fifth do.	40 Ditto	44
Sixth do.	50 Ditto	55

From other Materials.

First proof	25 cents per gallon	27 $\frac{1}{2}$
Second do.	25 Ditto	27 $\frac{1}{2}$
Third do.	28 Ditto	30 $\frac{4}{5}$
Fourth do.	32 Ditto	35 $\frac{1}{5}$
Fifth do.	38 Ditto	41 $\frac{4}{5}$
Sixth do.	46 Ditto	50 $\frac{3}{5}$

Spirits distilled in the United States,
imported in the same Ship or vessel
in which they had been previously
exported from the United States,
viz.

From molasses.

First proof	13 Ditto	13
Second do.	14 Ditto	14
Third do.	15 Ditto	15
Fourth do.	17 Ditto	17
Fifth do.	21 Ditto	21
Sixth do.	28 Ditto	28

*From materials of the growth and
produce of the United States.*

First proof	7 Ditto	7
Second do.	8 Ditto	8
Third do.	9 Ditto	9
Fourth do.	11 Ditto	11
Fifth do.	13 Ditto	13
Sixth do.	18 Ditto	18

	If imported in	
	Amer. vessels.	For. vessels.
Spikes	1	cent per pound $1\frac{1}{10}$
Silver and plated ware	15	per cent. ad val. $16\frac{1}{2}$
— lace	15	Ditto $16\frac{1}{2}$
Shoes and slippers of silk	25	cents per pair $27\frac{1}{2}$
— other shoes and slippers for men and women, clogs and golo- shoes	15	Ditto $16\frac{1}{2}$
— other shoes and slippers for children	10	Ditto 11
Swords and cutlasses until the 22d day of May 1795	free	free
Swords, cutlasses, or parts of either, after the 22d day of May, 1795	15	per cent. ad val. $16\frac{1}{2}$
Stockings	15	Ditto $16\frac{1}{2}$
Stone and earthen ware	15	Ditto $16\frac{1}{2}$
Soap	2	cents per pound $2\frac{1}{5}$
Solos and other carriages, or parts thereof	20	per cent. ad val. 22
Sulphur	free	free
Sugars, brown	$1\frac{1}{2}$	cent per pound $1\frac{1}{2}$
— white clayed	3	Ditto $3\frac{3}{10}$
— ditto powdered	3	Ditto $3\frac{3}{10}$
— all other clayed or powdered	$1\frac{1}{2}$	Ditto $1\frac{1}{2}$
— lump	$6\frac{1}{2}$	Ditto $7\frac{3}{10}$
— loaf	9	Ditto $9\frac{9}{10}$
— other refined	$6\frac{1}{2}$	Ditto $7\frac{3}{10}$
Sugar candy	10	per cent. ad val. 11
Snuff	22	cents per pound $24\frac{5}{8}$
Tables of marble, slate, and other stone, or parts thereof	15	per cent. ad val. $16\frac{1}{2}$
<i>Teas from China and India.</i>		
— bohea	10	Ditto 15
— fouchong and other black teas	18	Ditto 27
— hyson, imperial, gunpowder, or gomee	32	Ditto 50
— other green teas	20	Ditto 30
<i>From Europe.</i>		
— bohea	12	Ditto 15
— fouchong and other black teas	18	Ditto 27
— hyson, imperial, gunpowder, or gomee	40	Ditto 50
— other green teas	24	Ditto 30
<i>From any other Place.</i>		
— bohea	15	Ditto $16\frac{1}{2}$
— fouchong and other black teas	27	Ditto $29\frac{7}{10}$
— hyson, imperial, gunpowder, or gomee	50	Ditto 55
— other green teas	30	Ditto 33
Teneriffe wine	20	cents per gallon 22

	If imported in	
	Amer. vessels.	For. vessels.
Tin manufactures	15 per cent. ad val.	16 $\frac{1}{2}$
— in pigs and plates	free	free
Tinctures (see powders, pastes, &c.)	15 per cent. ad val.	16 $\frac{1}{2}$
Toys, not otherwise enumerated	10 Ditto	11
Tobacco manufactured (other than snuff)	10 cents per pound	11
Velvets and velverets	10 per cent. ad val.	11
Wafers	15 Ditto	16 $\frac{1}{2}$
Waters and washes (see powders, pastes, &c.)	15 Ditto	16 $\frac{1}{2}$
<i>Wines, in casks, bottles, or other vessels.</i>		
London particular Madeira	56 cents per gallon	61 $\frac{3}{5}$
London market do.	49 Ditto	53 $\frac{9}{10}$
other do.	40 Ditto	44
Burgundy and Champaign	40 Ditto	44
Sherry	33 Ditto	36 $\frac{3}{10}$
St. Lucar	30 Ditto	33
Lisbon and Oporto	25 Ditto	27 $\frac{1}{2}$
Teneriffe, Fayal and Malaga	20 Ditto	22
All other wines not to exceed thirty cents per gallon in American ves- sels, or thirty-three cents per gallon in foreign vessels; nor be less than ten cents per gallon in American vessels, or eleven cents per gallon in foreign vessels		
	40 per cent. ad val.	44
On value of the bottles	10 Ditto	11
Wool unmanufactured	free	free
Wood unmanufactured	free	free
Wood manufactured (exclusive of ca- binet wares)	12 $\frac{1}{2}$ per cent. ad val.	13 $\frac{3}{4}$
All other goods not before particularly enumerated and described	10 Ditto	11



After the 31st day of December 1794, no refined loaf or lump sugar shall be imported into the United States from any foreign port or place, except in ships or vessels of the burthen of one hundred and twenty tons and upwards, and in casks or packages containing each not less than six hundred pounds, on pain of forfeiting the said ships or vessels, and the loaf and lump sugar imported therein, except in such casks or packages as aforesaid.

TONNAGE.

By act of July 20, 1790, to be paid in TEN DAYS after entry and before clearance.

	Cents per ton.
On vessels of the United States from foreign ports	6
On vessels built in the United States, after the 20th of July, 1789, but owned in part or wholly by foreigners—duly recorded,	30
All other vessels,	50
Every vessel employed in transporting goods coast-ways, except such vessels be built in, and belong to citizens, on each entry,	50
Vessels built in, and belonging to citizens of the United States in coasting trade, or fishery, pay once a year, if licensed,	6
If not licensed, pay with goods taken in one state, to be delivered in another, except the adjoining state, on each entry,	6

DUTIES PAYABLE IN

	Dols.	Cts.
Gold coins of Great Britain and Portugal, of their present standard, - - - every 27 grains	1	
Gold coins of France, Spain, and the dominions of Spain, - - - 27 $\frac{2}{5}$ grains	1	
Spanish milled dollars, - - - 17 dwt. 7 grs.	1	
Crowns of France - - - 18 dwt. 17 grs.	1	10

BOUNTY.

On every barrel of pickled fish exported, of the fisheries of the United States, 18 cents.

On every barrel of salted provisions exported, salted within the United States, 15 cents.

And from and after the first day of January, 1793, an addition of twenty per centum to the allowances respectively granted to the ships or vessels employed in the bank or other cod fisheries.

FEES.

To Collector and Naval Officer.

	Dols.	Cts.
Entry of a vessel of 100 tons or upwards, -	2	50
Clearance do. do. do. - -	2	50

	Dols.	Cts.
Entry of a vessel under 100 tons,	1	50
Clearance do. do. do.	1	50
Permit to land goods,		20
Every bond taken officially,		40
Permit to land goods, for exportation, for drawback,		30
Every other official document (register excepted)		20

Fees to Surveyor.

For measurement of a vessel of 100 tons and under, per ton	1
For do. 100 to 200 tons	150
For do. above 200 do.	200
On each vessel of 100 tons and upwards, with goods subject to duty,	3
On each vessel under 100 tons, with do.	1 50
All vessels not having goods subject to duty,	66½

No vessel not wholly belonging to a Citizen or Citizens of the United States, shall be admitted to unload at any port or place, except the following, to wit.

NEW-HAMPSHIRE—*Portsmouth*.—MASSACHUSETTS—*Portland, Falmouth, New-Bedford, Dighton, Salem, Beverly, Gloucester, Newbury-Port, Marblehead, Sherburn, Boston and Charlestown, Bath, Frenchman's-Bay, Plymouth, Wiscasset, Machias, Penobscot*.—RHODE-ISLAND—*Newport and Providence*.—CONNECTICUT—*New-London, New-Haven*.—NEW-YORK—*New-York*.—NEW-JERSEY—*Perth Amboy, Burlington*.—PENNSYLVANIA—*Philadelphia*.—DELAWARE—*Wilmington, Newcastle, Port-Penn*.—MARYLAND—*Baltimore, Annapolis, Vienna, Oxford, George-Town on Patowmac, Chester-Town, Nottingham, Cedar-Point, Town-Creek, Nanjemoy, Digges Landing, Snow-Hill, Carrolsburgh*.—VIRGINIA—*Alexandria, Kinsale, New-Port, Tappahannock, Port-Royal, Fredericksburg, Urbanna, York-Town, West-Point, Hampton, Bermuda Hundred, City-Point, Rocket's Landing, Norfolk, Portsmouth*.—NORTH-CAROLINA—*Wilmington, Newbern, Washington, Edenton, and Plankbridge*.—SOUTH-CAROLINA—*Charleston, George-Town, Beaufort*.—GEORGIA—*Savannah, Sunbury, Brunswick, St. Mary, and Frederica*.

Nor shall any vessel from the Cape of Good Hope, or beyond the same, be admitted to enter, except at the ports in the above list, which are distinguished by *Italics*.

AMOUNT OF EXPORTS.

For the year ending 30th of September, 1792.		For the year ending 30th of September, 1793.	
	Dollars.		Dollars.
New-Hampshire	181,407	_____	198,197
Massachusetts -	2,889,922	_____	3,676,413
Rhode-Island -	698,084	_____	616,416
Connecticut -	- - - -	_____	770,239
New-York -	2,528,085	_____	2,934,369
New-Jersey -	23,524	_____	54,176
Pennsylvania -	3,820,646*	_____	6,958,736
Delaware -	133,978	_____	71,242
Maryland -	2,550,258	_____	3,687,119
Virginia -	3,549,499	_____	2,984,317
North-Carolina -	503,294	_____	363,307
South-Carolina -	2,430,425	_____	3,195,874
Georgia -	458,973	_____	501,383
	+		26,011,787



The exports of the year ending the 30th of September, 1793.
went to the respective countries undermentioned :

Russia - - - -	5,769	Italian Ports - -	220,688
Sweden - - - -	310,427	Morocco - - - -	2,094
Denmark - - - -	870,508	East-Indies - -	253,131
Holland - - - -	3,169,536	Africa - - - -	251,342
Great-Britain -	8,431,239	West-Indies - -	399,559
Imperial Ports -	1,013,347	N. W. Coast of Amer.	1,586
Hans-Towns - -	792,537	Uncertain - - -	3,986
France - - - -	7,050,498		
Spain - - - -	2,237,950		26,011,787
Portugal - - -	997,590		

* The exports of Pennsylvania, for the quarter ending the 31st of December, 1792, were one million seven hundred and forty thousand six hundred and eighty-nine dollars.

† Not having obtained correctly the exports of Connecticut for this year, we have not cast up the total amount.

RENT, PRICES OF LAND, PROVISIONS, &c.

On this article, with respect to the New-England States, we are not enabled to add much additional information. In the country parts, provisions of all kinds, the produce of America, are very cheap, in many instances, much below half the price in the country parts of England, but the general average is from one third to one half less.

Fish is plenty and cheap beyond any comparison with the most favourable European markets; the sea around their coasts, and the inland rivers, furnishing an inexhaustible supply. Game of various kinds is also exceedingly plenty. Some addition must be made to the prices of most articles in the large towns, owing to the number of Europeans which the present distressing situation of affairs in their own countries have driven thither.

With respect to the Middle States, we are enabled to adduce more particular information. The journeys of the Rev. Mr. Toulmin and Mr. Cooper have afforded information sufficient to enable us to form a tolerable correct idea of the price of most articles in those parts of the Union; the places where the prices are taken being so situated as in the general to afford a medium average.

VIRGINIA.

URBANNA, upon the Rappahannock in the county of Middlesex.*—Soil, white, loose, sandy.—Price, about one third cleared,† fifteen shillings‡ per acre of sixty-nine and two-thirds yard square.—The rent of corn land, about one shilling and six-pence per acre.—The labour here, as in most parts of Virginia, is by slaves only, either purchased or rented. They are hired at from six to nine pounds a year, the master finding provisions and cloathing, and paying the tax. The usual allowance to a slave is a peck and half of the meal of Indian corn per week; sometimes pickled and salted herrings or mackarel.—The cloathing is very trifling.

The produce of land here is tobacco, wheat, and corn.§—

* URBANNA has all the appearance of a deserted village.

† By cleared is meant, the small trees and shrubs grubbed up, and the larger trees cut down about two feet from the ground, the stumps remaining.

‡ All the sums are reckoned in sterling, except otherwise mentioned.

§ By corn is meant exclusively Indian corn or maize. Ble de Turquie.

The market is by water direct from Urbanna to Europe.—Corn also, maize, to New-England, Nova-Scotia and to the West-Indies; the price on an average, wheat four shillings and six-pence per bushel, and corn thirteen shillings and six-pence per barrel of five bushels.

RICHMOND, and the neighbourhood.—Soil; sandy, except on the banks of James river where it is rich. The price of land from four to six guineas per acre; but land by the whole tract, including buildings, cleared and uncleared land together, seldom exceeds, at ten miles distance from the town, twenty to forty-five shillings per acre. It is reckoned in this, and many parts of this State, an advantage to have a great part of it in wood, because the culture of tobacco, which has been common, but is now rapidly giving way to wheat, has exhausted the land so much, that it is used out, and is generally reckoned at nothing in the purchase. Labour here is from one shilling and six-pence to two shillings a day, with provisions. In harvest, from two shillings and six-pence to three shillings and six-pence a day. All slave labour.—Indian corn sells here from one shilling and six-pence to one shilling and ten-pence halfpenny per Winchester bushel; wheat, three shillings and four-pence to three shillings and nine-pence; barley, two shillings and seven-pence to three shillings; oats, eleven-pence to one shilling and four-pence; rice, from twelve to thirteen shillings and six-pence per hundred pounds; potatoes, one shilling and six-pence to two shillings and three-pence per bushel; flour, from wheat, per barrel of one hundred and ninety-six pounds net, nineteen shillings and six-pence to twenty-two shillings and six-pence; hops, one shilling and one penny per pound; coffee, nine-pence to eleven-pence, if bought by the cwt. retail, one shilling and a penny; tea, bohea, retail, two shillings and three-pence; fouchong, four shillings and six-pence; hyson, seven shillings and six-pence per lb.; by the chest, bohea, one shilling and six-pence to one shilling and ten-pence; hyson, four shillings and six-pence to five shillings and three-pence per lb. chocolate, seven-pence to nine-pence per lb. by the box of fifty pounds weight; butter, by the cask of sixty pounds, five-pence to seven-pence per lb. cheese, four-pence to six-pence; sugar, brown, by the hoghead, thirty-seven pounds ten shillings to sixty pounds. Formerly it was thirty pounds to thirty-seven pounds ten shillings; retail, six-pence to eight-pence per pound; loaf, eleven-pence to one shilling and three-pence; treacle, one shilling and six-pence to two shillings and

three-pence per gallon by the hoghead. American rum by the hoghead, two shillings and seven-pence to three shillings per gallon; West-India, three shillings and nine-pence to four shillings and six-pence; French brandy, four shillings and six-pence to five shillings and seven-pence; Virginia peach brandy, three shillings; apple brandy, two shillings and seven pence to three shillings; whiskey, three shillings; gin per gallon, three shillings and four pence; gin in casks of four and a half gallons, brought from Holland, twenty shillings to twenty-two shillings and six-pence; Teneriffe wine, three shillings per gallon by the pipe; Lisbon, six pounds fifteen shillings to seven pounds ten shillings; Malaga, five pounds five shillings to six pounds fifteen shillings per cask, of thirty gallons; Madeira, forty-five to fifty guineas per pipe; London porter, nine shillings and nine-pence to ten shillings and six-pence per dozen, bottles included. Beer is not used; cider, by the cask or hoghead, three-pence to five-pence halfpenny per gallon. Grass fed beef, three-halfpence to two-pence farthing per lb. stall or winter fed, two-pence farthing to three-pence; veal, four-pence halfpenny to five-pence; mutton, three half-pence farthing to three-pence; lamb, four-pence half-penny to five-pence; pork, of excellent quality, eleven shillings and three-pence to seventeen shillings per hundred weight, by the hog; bacon and hams, three-pence to five-pence per lb.; turkey's, one shilling and six-pence to three shillings and four-pence each; salt, one shilling and six-pence to one shilling and ten-pence per bushel; soap, by the box, three-pence three farthings to four-pence halfpenny per lb.; candles, by the box, six-pence halfpenny to nine-pence halfpenny per lb.; fire wood, seven shillings and nine-pence to nine shillings a cord, that is a load, eight feet long, four feet high, and four feet broad; coals, seven-pence three farthings per bushel; hats, country made wool hats, one shilling and ten-pence to four shillings and six-pence; fur hats fifteen shillings to twenty-seven shillings; shoes, three shillings and nine-pence to seven shillings and six-pence a pair; boots, fifteen shillings to thirty-six shillings; wages of household male servants, negroes, six pounds to nine pounds a year; white men, labourers, thirteen pounds to eighteen pounds a year; female servants, chiefly negroes, four pounds ten shillings to six pounds a year. These are to be had either by purchase or by hire from their masters; few are free; price of a cow, one pound seven-pence to three pounds fifteen shillings; horses fit for the waggon or plow, seven pounds ten shillings

to fifteen pounds; working oxen, nine pounds a pair; sheep, four shillings and six-pence to twelve shillings each; waggons with geer complete for four horses, that will carry a ton and an half, twelve to eighteen pounds; cart for two horses, seven to eight pounds.

PUBLISHED RATES AT THE EAGLE TAVERN, RICHMOND,
IN VIRGINIA.

Breakfast, one shilling and six-pence; dinner with grog or toddy, two shillings and three-pence; cold supper, one shilling and six-pence; a bottle of porter, one shilling and ten-pence halfpenny; a quart of punch the same; a quart of toddy, one shilling and a penny halfpenny; a quart of grog, eleven-pence farthing; a bed room furnished, if above stairs, thirteen-pence halfpenny, or quarter dollar;* horses kept at livery, two shillings and three-pence per twenty-four hours; servants, two shillings and three-pence per day.

WINCHESTER†---Fish salted; shad, one pound two shillings and six-pence; herrings, eighteen shillings; salmon, two pounds five shillings per barrel, of two hundred pounds weight each; oysters, when in season, two shillings and three-pence per bushel; fruits; apples in autumn, nine-pence per bushel; at Christmas, one shilling to one shilling and six-pence; peaches, from one shilling and six-pence to three shillings per bushel; currants, two shillings and three-pence per bushel, but few raised for sale; wild fowl and pigeons; few for sale; pheasants, four-pence halfpenny each; partridges, nine-pence to one shilling a dozen. Cloathing at Winchester about two-thirds dearer than in London. Oak casks of thirty gallons, three shillings and nine-pence; tierces, five shillings and six-pence; barrels, six shillings and nine-pence. Building materials; logs trimmed on both sides, and delivered at the place of building, something more than one penny per foot; scantlings, three farthings per foot, measured side and side at the saw-mill; flooring planks, one inch and a quarter, five shillings and seven-pence per one hundred feet; one inch, four shillings and six-pence per one hundred; half inch, three shillings per one hundred; laths, on

* These prices are higher than in the northern States; the tables are also plentifully supplied. In the article of breakfast, all over the American continent, are included, ham, eggs, steaks, chops, &c. some or all of them. You are not obliged to drink after dinner. You have nothing to give the servants or waiters. In the article of supper, tea and coffee are usually included as accompaniments.

† This list contains, in general, articles not mentioned in the preceding list.

which the covering is nailed, about ten shillings per hundred feet, running measure ;—cypress shingles, from ten shillings and two-pence to thirteen shillings and six-pence per thousand, delivered at the place of building ; each shingle covering four by six inches ;—oak shingles, one pound one shilling per one thousand, covering ten by four inches ;—chestnut shingles, twelve shillings per thousand, covering six by four inches ;—lime, four-pence half-penny per bushel ; bricks delivered, eighteen shillings per thousand ; window glass, ten inches by eight, two pounds nineteen shillings a box, containing one hundred feet.

WAGES ; one shilling and three-pence, to one shilling and six-pence per perch, when the work is complete ; when found with provisions. Plasterers, three-pence per each square yard, when found ; glaziers, three-farthings per light, when found ; paper hanging, American, two shillings and three-pence to nine shillings per piece, of twelve yards each ; lodging and board in town, eleven pounds to twenty-two pounds ; in the country, nine pounds to fifteen pounds per annum.

NORFOLK.—The country about here is very barren ; animal food dear ; vegetables cheap. Houses of wood are cheaply built : a house of two stories, six yards by four, will cost about fifty pounds sterling. Horses cheap to purchase, but dear to hire ; the hire of a horse being a dollar a day : they go unshod during summer. Board and lodging for adults, in a plain but plentiful way, four or five dollars a week ; for children, two dollars ; servants, three dollars. Board and lodging per annum, thirty-three pounds fifteen shillings. The great influx of French emigrants from the islands having considerably increased the price.

Peaches, one penny and two-pence per dozen ; apples, six-pence a peck ; cucumbers, two-pence a dozen ; cyder, two-pence half-penny a quart ; milk, six-pence a quart, owing to carelessness and bad farming ;* bacon, six-pence a pound. Norfolk is about as large as Taunton in Devonshire, or Wigan in Lancashire. Most of the houses of wood ; some of brick. A neat house, thirty feet by twenty-nine, two stories high, with a kitchen on one side, and a smoking room, for bacon, hams, &c. in the yard, will cost complete, one hundred and fifty pounds.† Dress of the people much the same as in England ; slaves all barefooted.

* The cows range at pleasure in the woods ; no attention is paid to their calving ; they are not often milked above once a day.

† Houses are generally covered with wooden shingles, oak or cypress, plastered within, and glazed in sashes.

FREDERICK AND BERKELEY COUNTIES.—Soil. The best part of the country lies between the waters of the Opekan creek, and the Shenandoah: it is the richest lime-stone land on the eastern waters of this State: it is of a dark grey, and supposed to be much about the same quality as the third-rate land in Kentucky. The price of land is from fifteen shillings to four pounds an acre, but seldom so low as fifteen shillings in the best part of these counties, *i. e.* one-half or two-thirds cleared. A good plot of land of two hundred acres, with a house, orchard, barn, meadow and spring, may be rented at forty-five pounds a year.

Labour from five to seven dollars per month, of twenty-six working days, with board: white servants are very scarce on the eastern side of the valley.—The produce of land, wheat and corn.—Price of flour here is one guinea per barrel: the price has usually been three shillings, and this year even six shillings and seven shillings and six-pence per barrel of one hundred and ninety-six pounds net, more at Philadelphia than at Baltimore; owing to the greater number of ships coming to the former port.†—The market; Alexandria, carried in waggons for seven shillings and six-pence per barrel of flour weighing one hundred

† When the federal city is fully established, which is nearly certain, larger capitals, &c. will probably be employed on the Potomack, and provisions and lands rise in the neighbourhood; but the difficulty of procuring labourers, and the objections to slave labour, will still remain.

The opening of the Potomack by the canal, round the falls, will also render it an object of importance to capitalists to embark in commerce at Alexandria or George-town. At present, many boats come down from fort Cumberland to the Great falls, about ten miles above George-town. Six weeks work, it is computed, will complete the navigation to the mouth of Savage river, the boundary of the proposed plan westward; and the canal at the Great falls is expected to be finished in eighteen months.

Whether the Shenandoah will be rendered navigable is a much more questionable point. The Potomack company have the exclusive right of undertaking the work, and they have as yet shewn no serious intention of attempting it. The obstructions at the mouth of the river are considerable.

The mouth of Savage river is about forty miles from the Monongahela. Boats capable of carrying ten tons weight, or one hundred hogheads of flour, will be able to go from thence to Alexandria in four or five days; but it will take more than double the time to return. It is now common for persons who send their produce about sixty miles, to pay a quarter dollar (one shilling and six-pence) per hundred pounds.

and ninety-six pounds, and the barrel seventeen pounds, the distance of eighty miles.

Prices of land in particular places.—Near Charleston, within eight miles of the Potomack, the best land three pounds fifteen shillings per acre.—Within a mile of the junction, and upon the Shenandoah, it may be had for two pounds five shillings and three pounds per acre, as the land is broken and stony, though fit for wheat.—At Shippand's-town, on the south side of the Potomack, it is from two pounds five shillings to three pounds fifteen shillings per acre, but it is not equal to that in the valley; it is, however, nearer to the market.*

MARYLAND.

The neighbourhood of Haggar's town on the Antietam creek.—Soil; a dark-coloured loam similar to that on the south side of the Potomack. Price of land from sixteen to twenty-four dollars, *i. e.* from three pounds twelve shillings to five pounds eight shillings per acre, one half cleared: within eight or ten miles.—Husbandmen scarce. Wages one shilling and six-pence and provisions per day, or five to six dollars, *i. e.* twenty-two shillings and six-pence to twenty-seven shillings per month.—The market is Baltimore; where wheat fetches about seven-pence a bushel more than at Alexandria. The price of taking flour to Baltimore, seventy-five miles, five shillings and three-pence per barrel. It may be sent to Alexandria, eighty miles for a dollar, one-third of which is for the land carriage to William-port, eight miles, at the mouth of the Conegocheague creek: but for want of a warehouse at the Great Falls, this mode of conveyance is less useful at present than it would otherwise be. Ten miles north-west of Haggar's-town, and upon a part of the Conegocheague creek, to which the navigation may be easily extended. Land, one-half cleared, and the rest in wood, will fetch six pounds per acre. This creek has been used already, during a week or two in the spring,

PENNSYLVANIA.

SHIPPENSBURG, twenty-one miles south of Carlisle.

Soil. A good loam, though not equal probably to that last noticed.—Price of land two pounds to three pounds ten shil-

* A waggon will go in four days to and from Alexandria. Estates here are small and are generally cultivated without slaves.

lings per acre.—Labour, five to six dollars a month.—Market, Baltimore, distance eighty miles.

CARLISLE, and its vicinity—Soil; a loam, as in the other parts of the valley. A stratum of slate runs through all the valley, and is found on one side of the Opekan creek, in Virginia; the Conegocheague creek, in Maryland, and Pennsylvania, and the Conedogwinit creek, in Pennsylvania, where the soil is much inferior to the lime-stone soil. The price of land upon the lime-stone side of the Conedogwinit, Pennsylvania, is from three pounds six shillings to four pounds ten shillings per acre; being in a proportion of meadow and upland. Lands in general about three miles round Carlisle, though not upon the creeks, sell from three pounds to three pounds twelve shillings, and four pounds ten shillings per acre, according to its quality, supposing about one-third cleared. Land at a greater distance, and within seven or eight miles, at from two to three pounds, except the low rich meadows. Lands nearer the Susquehannah, being richer and nearer market, sell from five to eight pounds, and within a mile of Harrisburgh, twelve pounds an acre. Land, with indifferent improvements, near Middletown, the head of the proposed junction between the Susquehannah and the Schuylkill, sell from three to four pounds.

Produce---Principally wheat.

Market---Philadelphia.

Expense of carriage, by land as yet, six shillings per barrel from Harrisburgh.*

NEAR LANCASTER.---Soil; a durable clay, not liable to be much injured either by the wet in winter, or the sun in summer. The most indifferent land here, with scarcely any improvement, sells at from six to eight pounds an acre, and often from twelve to eighteen pounds.† Labour is from eight dollars to ten a month, and board. Market---Philadelphia.

* The people of Carlisle have the character of being unforgiving, and jealous of new-comers, and always careful that they shall not have too much influence in public affairs.

Harrisburgh and Middletown are delightfully, and with respect to trade, eligibly situated on the banks of the Susquehannah, but are subject to intermitting complaints.

† At Carlisle and Lancaster, and throughout the Pennsylvania part of the Shenandoah valley, the Dutch settlers are numerous; their unremitting industry and attachment to place always makes land comparatively dear in their neighbourhood.

READING, and its neighbourhood, fifty-six miles from Philadelphia.---Land at this place sells, in an improved state, with house, out-houses, &c. at from eight to ten pounds currency per acre, or six to seven pounds ten shillings sterling.

SUNBURY AND NORTHUMBERLAND, on the Susquehannah.---The houses here are partly built of logs, and partly of frame-work, one or two stories high, sashed and glazed, some of them painted on the outside, all of them neat without, and clean within; comfortable and commodious.

The price of building a log-house here, of four rooms on a floor, each about twelve feet square, one story high, finished within side with plain wainscoting, pannel doors, lock and thumb latches, glazed windows, &c. complete; about one hundred and ninety pounds sterling. The log-houses, of sound so uncouth to an English ear, are as comfortable, as clean, and as convenient, as any brick or stone house in England. They are made by placing logs of trees transversely, one upon the ends of two others, which are notched to let them in; the interstices are plaistered, and the outside and inside frequently cased. If the logs are placed upon stone-work, about a foot from the ground, so as not to be exposed to alternate moisture and drought, they will last half a century or more very well.

The soil about Sunbury and Northumberland, which, as the river only divides them, we speak of together, is a sandy loam, several feet deep near the river, and apparently excellent for almost any kind of vegetation. Their produce here, as in most other parts of Pennsylvania, is corn, wheat, oats, rye, buck-wheat, potatoes, and some little barley. Prices, wheat per bushel, three shillings and nine-pence; oats, two shillings to two shillings and three-pence; rye, three shillings to three shillings and six-pence; corn, maize, three shillings; buck wheat, one shilling and ten-pence; potatoes in the spring, two shillings and six-pence to three shillings and nine-pence; in the autumn, one shilling and two-pence to one shilling and ten-pence a bushel. Cyder, per barrel, according to the crops of apples; in 1793 it was from thirteen shillings and six-pence to eighteen shillings; 1792, it was from seven and six-pence to nine shillings: beer, none; there was a brewery at Northumberland some time ago, but it has been discontinued; while it was carried on, ale sold for eighteen shillings, and porter three pounds per barrel of thirty-one gallons. Wages in the town, two shillings and three-pence a day; in the country, one shilling and ten pence to two shillings

and three-pence, and board. The common drink, cyder, or whiskey and water.

Beef, three-pence per lb.; mutton, two-pence to three-pence; venison, two-pence to three-pence; these are bought at the butchers, or of farmers, who bring meat to town to retail; butter at Christmas, one shilling and six-pence per lb.

A cord of oak fire-wood, three shillings and six-pence; hickory, seven shillings and six-pence.

Produce of wheat twenty to thirty bushels an acre. A Mr. Grant, of Sunbury, one dry summer, obtained sixty bushels per acre, but one-half of this quantity is common. The new lands and the stony rich lands near the river are too rich for wheat, and require to be reduced by corn, flax or tobacco. Otherwise, unless in a very dry summer, the grain shoots up into straw. Wheat and barley grow best on the tops of the hills, and even in stony ground.

Land, in the immediate vicinity of Sunbury, sells from eighteen to twenty-three pounds an acre. Building lots of one quarter or half an acre, in Northumberland or Sunbury, from one hundred to two hundred dollars each. Land, a few miles distance, uncleared, twenty-two to thirty shillings an acre. Land, with a log-cabin, a log-barn, and about one-fourth improved, *i. e.* the trees cut down, and the underwood grubbed up, about two pounds five shillings, or two pounds ten shillings an acre.

Two years ago, the land on which the town of Northumberland stands, is said to have been offered to sale by the proprietor for two thousand pounds: he has since refused ten thousand pounds for it.

In 1793, the estate of the late Lord Sterling was offered for sale at seven pounds ten shillings an acre, which we apprehend to be the general price of cultivated land, in tolerable situations all through this State. Of uncultivated land there is very little. The expense of travelling between Philadelphia and New-York, both as to carriages and as to living, is about one-third cheaper than between the metropolis and any of the great towns in England.

NEW-YORK.

At New-York, you pay at the Tontine coffee-house eight dollars a week for board and lodging, wine excepted: in the former respect persons are much better provided than in any place in England, where they pay only the same price. The

advantage in point of cheapness, for equal accommodations at an inn, is at least one third in favour of New-York, beyond any of the great trading towns of England : board and lodging at private houses may be had from five to seven dollars a week.

At Albany, board and lodging in a plain family way is half a dollar a day. Butter, eight-pence a pound ; beef, two-pence three farthings ; cheese, five-pence ; pork, two-pence three farthings. An estate of five hundred acres, two miles from Albany, and four from Troy, part in woodland, sold in November, 1793, for three thousand three hundred pounds currency, or eighteen hundred and fifty-six pounds sterling. For a farm of sixty acres, about seven miles from Albany, the farmer pays twenty-five shillings, or eighteen bushels and three quarters of wheat, per annum, as rent.

For a farm, not far from the above, about seven or eight miles from Albany, consisting of one hundred acres of very rich land, long ago cleared, and one hundred acres more not cleared, having a good brick house and a commodious barn upon it, the owner in 1793, asked two thousand pounds.

Prices of provisions hereabout and at Skeneclady, which is inhabited chiefly by Dutch---beef, one penny three farthings a pound ; cheese, five-pence ; butter, eight-pence half-penny ; apples, one shilling and five-pence a bushel ; wheat, four shillings and six-pence ditto.

About ten miles beyond Skeneclady, up the Mohawk river, beef sells at thirteen shillings and six-pence per cwt. ; pork, three-pence farthing a pound ; turkeys, one shilling and five-pence ; geese, one shilling and five-pence ; fowls, eight-pence half-penny ; butter, six-pence three farthings ; salt, eight shillings per bushel ; cheese, five-pence a pound ; wheat, four shillings a bushel ; wood, three shillings and four-pence a cord. Wages of a labourer, one shilling and six-pence to two shillings in summer, and six-pence three farthings to one shilling and three half-pence in winter, per day ; carpenters, one shilling and six-pence ; masons, two shillings, besides victuals.

The canals intended to go from Skeneclady to Albany, and that which will pass the falls of the North river and connect Saratoga with Albany, and that which is intended to obviate the little falls of the Mohawk river, are all likely to proceed.

Land at the German flats sells from two pounds fifteen shillings to eight pounds ten shillings an acre. Land higher up toward the black river, though good, not above a dollar.

Land near Hartford in Connecticut, five pounds ten shillings to eight pounds ten shillings an acre.

Land upon one of the branches of the Delaware in New-York State, was offered for sale in London, in June 1794, for nine shillings an acre.

Land near the Mishoppen and Tuscorora creeks in Pennsylvania, about eight miles on the average, from the east branch of the Susquehannah, belonging to the person who owned the preceding parcel, was offered at the same time for eight shillings an acre in London.

The price of two dollars was asked at the same period and place for land near the Loyalsock, between the east and west branches of Susquehannah: and the same for land in Luzern county upon Lehawannock.

In this State the settlers are more in the habit of using the ashes of their wood to make pot-ash, and diminish the expense of clearing the land, than they are in Pennsylvania or the southern States. In July 1793, hearth ashes sold for six-pence three farthings a bushel; field ashes at five-pence half-penny; it costs two pounds four shillings a ton to make them into pot-ash; five hundred bushels of hearth, or seven hundred of field ashes, are computed to make a ton of pot-ash, which at New-York is worth twenty-seven pounds, or one hundred and twenty dollars. But we think this allowance of ashes hardly sufficient for the purpose.

From these detached facts, collected from the information of persons on the spot, the reader will be enabled to form a general opinion of the probable expenses of a settler in the Middle States. It will be observed in general, that where provisions are cheaper in one situation than another, the advantage is in the expenditure of an income in nearly the same proportion as the disadvantage to the landholder.

With respect to the western territory, provisions of all kinds, the produce of the country, are exceeding low in their price: but the great distance renders European commodities proportionably high, in most instances European goods will be nearly double the price they are at Philadelphia.

In the towns and villages of Kentucky, the following are the average prices of some of the most material articles: flour

is from six shillings to nine shillings per cwt. according to its quality: Indian corn from nine-pence to one shilling per bushel; beef, three halfpence to two-pence per lb.; veal, two-pence halfpenny ditto; mutton, three-pence ditto; which high price is owing to the general desire the farmers have to increase their stocks; pork is from two-pence to two-pence halfpenny per lb.; bacon from three-pence halfpenny to four-pence; bacon hams from four-pence to five-pence halfpenny; salt beef, two-pence; hung or dried beef, three-pence. Neats tongues, six-pence each; buffalo ditto, nine-pence; dunghill fowls, ducks, Muscovy ditto, geese, turkeys, Guinea fowls and pigeons, are proportionably cheap; butter is from two-pence halfpenny to three-pence halfpenny per lb.; cheese from two-pence to three-pence per ditto.

They have a variety of fish in the rivers, the most esteemed of which are the perch, trout, buffalo fish and soft turtle. The perch is in size from five to twelve pounds, is firm and fat in its season, which is from February until July. The trout is caught from eight to thirty pounds weight. This fish is too universally known and admired to require any account of its excellence, particularly as the trout in England is the exact miniature of it. The buffalo fish is in size from four to eight pounds, is a very fine fish, but inferior to the two former. But the soft turtle is, perhaps, the most delicious fish in the world, and amply compensates for their having no other testaceous fish. This turtle is gelatinous, except a small shell upon its back, about the bigness of the palm of the hand; the weight is from six to ten pounds.

Most people make their own sugar; but when it is sold, the price is from three-pence to four-pence halfpenny per pound, according to its fineness. The business of sugar refining is only commencing, which makes it impossible to say exactly what will be the general price of loaf or refined sugar; but we conclude it will be proportionably low with raw sugar, as the business can be carried on in this country at less expense than in Philadelphia and New-York, where the price of the necessities of life is so much higher. Tea, coffee, chocolate and spices, are higher here than in Philadelphia. Good green tea is from five shillings to eight shillings per pound; imperial or gunpowder, ten shillings and six-pence; pearl from twelve shillings to sixteen shillings; good fouchong from four shillings and six-pence to seven shillings per ditto; bohea from two shillings to three shillings and six-pence; coffee from one shil-

ling and nine-pence to two shillings; chocolate from one shilling and six-pence to one shilling and eight-pence. Spices are at least twenty-five per cent. higher than they are at Philadelphia or Baltimore.

In the year 1784, many officers who served in the American army during the late war having settled in this State with their families, and several families from England, Philadelphia, New-Jersey, New-York and the New-England States, the country soon began to be chequered with genteel persons, which operated both upon the minds and actions of the back woods people, who constituted the first emigrants. A taste for the decorum and elegance of the table was soon cultivated; and the pleasures of the garden were considered not only as useful but amusing. These improvements in the comforts of living and manners, have awakened a sense of ambition to instruct their youth in useful and accomplished arts. Social pleasures are likewise regarded as the most inestimable of human possessions; the genius of friendship appears to foster the emanations of virtue, while the cordial regard, and sincere desire of pleasing, produces the most harmonious effects. Sympathy is regarded as the essence of the human soul, participating of celestial matter, and as a spark engendered to warm benevolence, and lead to the raptures of love and rational felicity.

With such sentiments the amusements of this State flow from the interchange of civilities, and a reciprocal desire of pleasing. That sameness may not cloy, and make them dull, they vary the scene as the nature of circumstances will permit: the opening spring brings with it the prospect of their summer's labour, and the brilliant sun actively warms into life the vegetable world, which blooms and yields a profusion of aromatic odours: a creation of beauty is now a feast of joy, and to look for amusements beyond this genial torrent of sweets would be a perversion of nature, and a sacrilege against heaven.

The season of sugar-making occupies the women, whose mornings are cheered by the modulated buffoonery of the mocking bird, the tuneful song of the thrush, and the gaudy plumage of the parroquet. Festive mirth crowns the evening. The business of the day being over, the men join the women in the sugar groves, where enchantment seems to dwell. The lofty trees wave their spreading branches over a green turf, on whose soft down the mildness of the evening invites the neighbouring youth to sportive play; and while the rural Nestors, with calculating minds, contemplate the boyish gambols of a growing

progeny, they recount the exploits of their early age, and in their enthusiasm forget there are such things as decrepitude and misery. Perhaps a convivial song, or a pleasant narration, closes the scene.

Rational pleasures meliorate the soul; and by familiarizing man to uncontaminated felicity, sordid avarice and vicious habits are destroyed.

Gardening and fishing constitute some part of the amusements of both sexes. Flowers and their genera form one of the studies of the ladies; and the embellishment of their houses, with those which are known to be salutary, constitute a part of their employment. Domestic cares and music fill up the remainder of the day, and social visits without ceremony or form, leave them without ennui or disgust. The young men are too gallant to permit the women to have separate amusements; and thus it is that even in Kentucky we find that sauciness and politeness of manners universal, which can only be effected by feminine polish.

The autumn and winter produces not less pleasure. Evening visits mostly end with dancing by the young people, while the more aged indulge their hilarity, or disseminate information in the discussion of politics, or some useful art or science.

Such are the amusements of this country, and such the mode of living, which have for their basis hospitality, and all the variety of good things that a luxuriant soil is capable of producing, without the alloy of contaminating vice and artificial want.

PREVALENT DISEASES IN THE UNITED STATES.

All countries have some peculiar diseases, arising from the climate, manner of living, occupations, predominant passions, and other causes, whose separate and combined influence is but imperfectly known. In North America we may count five:—nervous disorders, rheumatism, intermitting fevers, loss of teeth, and colds. It is remarkable, that nervous complaints are at present more frequent in Europe than they formerly were. They spring in a great measure from the indulgencies of a civilised life; but in America these fiends infest with less discrimination on the dwellings of industry and temperance. Proteus-like they assume every shape, and often baffle the best physicians. Their baneful effect on the mind requires the serious attention of legislators, divines, and moral philosophers: we have often

witnessed their amazing influence on religious sentiments. When extreme, they derange the whole system, obscure the intellects, bewilder the imagination, prevent the natural order and operation of all the passions; the soul vibrates between apathy and morbid sensibility; she hates when she should love, and grieves when she ought to rejoice; she resembles a disordered clock, that after long silence, chimes till you are tired, and often instead of one, strikes twelve. These extremes are indeed rare, but the more general degrees are still analogous, and produce a great sum of evil.

Slight rheumatic pains are almost epidemic in some seasons of the year. Yet these are scarcely worth mentioning in comparison to the severe fits that afflict a great number of persons, even in the earlier parts of life, growing more frequent and violent with age, not seldom attended with lameness, and contraction of limbs.

Fever and ague is here, as in other countries, the plague of marshy and fenny situations, but what is singular, it also visits the borders of limpid streams. The lesser degree of it, generally called *dumb ague*, is not rare in the most salubrious places during the months of September and October. Through all the low countries from north to south this disease rages in a variety of hideous forms; and chiefly doth the fury *quarten* with livid hue, haggard looks, and trembling skeleton limbs, embitter the life of multitudes: many linger under it for years, and become so dispirited, as not even to seek any remedy. It is a foul source of many other diseases, often terminating in deadly dropsies and consumptions.

Premature loss of teeth is in many respects a severe misfortune. By impairing mastication, and consequently digestion, it disposes for many disorders. It injures the pronunciation, and is a particular disadvantage in a great republic, where so many citizens are public speakers; it exposes the mouth and throat to cold, and various accidents; it diminishes the pleasure of eating, though not sublime pleasure of life, and which we have heard some persons very emphatically regret. Finally, it is a mortifying stroke to beauty, and as such deeply felt by the fair sex. Indeed, that man must be a stoic, who can without pity behold a blooming maiden of eighteen afflicted by this infirmity of old age! This consideration is the more important as the amiable affections of the human soul are not less expressed by the traits and motions of the lips, than by the beaming eye. We have not mentioned the pains of tooth-ach, because

they are not more common or violent in this country than in some others, where loss of teeth is rare; many persons here losing their teeth without much pain.

The complaint of *catching cold* is heard almost every day, and in every company. This extraordinary disorder, little known in some countries, is also very common in England. An eminent physician of that country said, that "colds kill more people than the plague." Indeed, many severe disorders originate from it among the Americans, as well as amongst Europeans: it is probably often the source of the before-mentioned chronic diseases. When it does not produce such effects, it is nevertheless a serious evil, being attended with loss of appetite, hoarseness, sore eyes, head-ach, pains and swellings in the face, tooth and ear-ach, rheums, listless languor and *lowness of spirits*: wherefore Shenston had some reason to call this uneasiness *a checked perspiration*. Great numbers in some parts of the United States experience more or less these symptoms, and are in some degree valetudinarians for one third of the year.

Eminent medical authors have, indeed, treated of these distempers; and some American physicians deserve applause for their theoretical and practical exertions. Still it is devoutly to be wished that these national evils may draw a more pointed attention: the limits of our design, however, permit only a few additional remarks.

These distempers frequently co-exist in the most unhealthy parts of the country, and not seldom afflict individuals with united force. Compassion for suffering fellow citizens ought in this case to animate investigation of those general and complicated local causes. The extreme variableness of the weather is universally deemed a principal and general cause of colds, and of the disorders by them produced; the fall and rise of the thermometer by 20 and 30 degrees within less than four and twenty hours, disturbing the strongest constitutions, and ruining the weak. A most important desideratum is therefore the art of hardening the bodily system against these violent impressions; or, in other words, accommodating it to the climate. The general stamina of strength support it under the excesses of both cold and heat; the latter is, however, the most oppressive, as we can less elude it by artificial conveniences. The Americans suffer, especially during the summer four, till 6 a 8, critical extremes, when the thermometer after 86 a 92 degrees falls suddenly to 60. Could means be found to blunt these attacks on the human constitution, they would save multitudes from death and lingering diseases. Sometimes this crisis

happens as late as medium September, and is in a few days succeeded by the autumnal frosts; in such case weak persons receive a shock, from which they cannot recover during the autumn, and which aggravate the maladies of the winter, especially when it is early and rigorous.

Searching for general causes of the beforementioned distempers in the popular diet, the following circumstances should be examined: excessive use of animal food, especially pork; the common drink of inferior spiritous liquors, both foreign and home made, not to mention a too frequent intemperance even in the best kinds; the constant use of tea among the fair sex, drank generally very *hot* and *strong*, and often by the poorest classes, of a bad quality.

In the general modes of dress we plainly discern these defects:—the tight-bodied clothes, worn by both sexes, increase the heat of a sultry summer; the close lacing and cumbersome head-dresses of the ladies are especially injurious to health. The winter cloathing is too thin for the climates of the northern and middle States, which is for several months at times equally cold with the north of Europe. Few persons sufficiently preserve their feet from the baneful dampness of the fust occasioned by the frequent vicissitudes of hard frosts and heavy rains during the winter; women generally wear stuff shoes: the American leather, though otherwise good, is very spongy, a defect owing to the precipitate process of tanning. Nor does either sex guard the head against the piercing north-west wind, which is general for five or six months: on journeys especially, the men should exchange their hats for caps that cover the ears and cheeks.

In the modes of lodging these improprieties are observable; the poorer, or more indolent people, especially in the less improved parts of the country, frequently dwell in houses that are open to the driving snow and chilling blast: good houses often want close doors; a chasm of six or eight inches near the floor admits a strong current of cold air, which sensibly affects the legs. Such houses cannot be sufficiently warmed by the common fire places; hence the frequent complaint, that the fore part of the body is almost roasted, while the back is freezing; a situation very unnatural, productive of rheumatism and other distempers. The larger towns of North America have, with their spacious streets, a number of narrow alleys, which are peculiarly detrimental in a sultry climate, and in co-operation with the slovenly habits of their poorer inmates, are nurseries of disease.

Among the general customs which may influence health, the most striking is an excessive, and in some cases an ill-judged cleanliness: the continual washing of houses, especially in the cold season, has, we are confident, cost the lives of many estimable women, and entailed painful diseases on their families.

In the business of life we often remark a very irregular application; indolence succeeded by hurry and intense fatigue. This must particularly injure husbandmen, as the neglect of a day may damage a precious crop, if it is not compensated by exertions, which in the sultry heat of summer are very trying to the strongest constitutions.

As to nervous disorders, philanthropy compels us to remark, that, besides their general connection with a sickly constitution, they have in a great measure originated from two singular causes. One is the convulsion of public affairs during and for some time after the war, which occasioned many and great domestic distresses. The natural events of the war are universally known, and numbers of virtuous citizens also feel the dire effects of the succeeding anarchy, especially in the loss of property.* The operations of this cause are, however, continually lessened by time that cures our griefs, or buries them in the grave; and such evils will under Providence, be for ever prevented by the new confederation of the United States. The other cause is that gloomy superstition disseminated by ignorant, illiberal preaches, the bane of social joy, of real virtue, and a manly spirit.† This phantom of darkness will be dispelled by the rays of science, and the bright charms of rising civilization.‡

* Not by violence, but the well known disorders of paper money in various forms.

† Perhaps, however, ere long it will be found, and universally acknowledged, that the prevalence of nervous disorders in Europe and America is owing to an ill-directed or corrupt education, particularly amongst females, where they most prevail; indeed, it is hardly possible to contemplate the present system of education without being convinced of this truth. Instead of fortifying the mind with sentiments suited to the various vicissitudes to which we are exposed in this life; instead of enlarging and cultivating the mind, and preparing it to meet adversity and prosperity without being dismayed at the one, or lifted up with the other, the whole attention is paid to exterior accomplishments; and the mind neglected, becomes the victim of unruly passions, of affectation, and a contemptible species of false delicacy, or else of despondency; either, or all of which, if they are not the immediate cause, are yet the means by which nervous disorders are fed and nourished.

‡ It is pleasing to see how fanaticism declines with agricultural improvement in many new settlements, and how refinement of public manners keeps pace with a preference of enlightened teachers.

GENERAL OBSERVATIONS ON THE NATURAL PRODUCE AND
RURAL ECONOMY OF THE UNITED STATES, &c.

The following observations and remarks are made with a particular reference to those who may adopt the farming business, and of course fix their residence at a distance from cities and towns. The United States, if they are truly wise, will continue to give every possible encouragement to agriculture; and though it is certainly their wisdom to pursue a manufacturing system, yet it would be highly injurious for them to give it a preference; indeed, their great object should be to make commerce and manufactures subservient to the cause of agriculture, and to make the latter the basis of the former. To do otherwise, would be perverting the order of nature. Agriculture has made a wonderful progress in several countries, since it became the business and favourite amusement of philosophers and men of taste; and the American farmer may reap great advantage from the many excellent writings on this subject, but much improvement is yet wanting in every part of this noble science; besides, their local circumstances require in some cases peculiar methods. The United States extend through several climates, and the general irregularity of the seasons mingles the diversity of climate in every State; Pennsylvania, for instance, has often within two or three months the climates of Sweden, England, and Italy. This points out the propriety of adopting some practices from different countries, and establishing others as their own.

As men of property and science have embraced the occupation of farmers in America, and as a majority of the House of Representatives, if not of the Senate, are of this class of men, as well as the president, we may reasonably expect that every attention will be paid to a subject so important in itself, and whereon so much of the happiness of America depends. Before, however, we offer any observations on the theory or practice of American farming, we shall endeavour to give as full and comprehensive an account as our plan will admit, of the vegetable productions of the United States; however, as few persons in the United States have studied natural history as a science, the best information on this subject must be very imperfect; the following we trust will, however, be found as complete as any that is at present extant.

FOREST TREES.

ELM, *ulmus Americana*. Of this tree there is but one species, of which there are two varieties, the white and the red. The inner rind of both is stringy and tough, and is frequently used for the bottoms of chairs, and for bed cords. The wood is not easily split, and therefore serves for the naves of wheels. The bark of the white elm is used medicinally for the gravel. The EUROPEAN ELM, *ulmus campestris*, is so far naturalized as to propagate itself in copes.

SASSAFRAS, *laurus sassafras*, is commonly found in moist land. It does not, in this state, grow to a large size. Its roots, bark and leaves have an aromatic smell. It affords a valuable ingredient for beer as well as for medicinal purposes. The wood makes handsome bedsteads, and it is said that bugs will not be found in them for several years. The SPICE WOOD, *laurus benzoin*, or as it is commonly called FEVER BUSH, is another species of the *laurus*, common in New-Hampshire: it is more aromatic than the sassafras. In the western country, its fruit and bark are used as a substitute for pimento.

WILD CHERRY. Of this they have many species, but they have not been well arranged and properly distinguished. They are very numerous in land which has been newly cleared, if not kept down by culture. The wood of the largest cherry tree, *prunus Virginiana*, is very highly esteemed in cabinet work, being of a firm texture, a smooth grain, and a beautiful colour, between red and yellow.

BASSWOOD, or LIME TREE, *tilia Americana*, is sometimes sawed into boards, which are very white, but soft, and easily warped.

LOCUST, *robina pseudo acacia*, is excellent fuel. Its trunk serves for durable posts set in the ground, and may be split into trunnels for ships, which are equal to any wood for that purpose. It thrives on sandy and gravelly soils, and its leaves enrich them. For these reasons, the cultivation of the locust has been thought an object worthy of attention, especially as it is a tree of quick growth. For several years past it has been injured by a beetle insect, which bores a hole through its trunk. Many trees have been entirely killed, and this circumstance has proved a discouragement to their propagation.

BIRCH. Of this they have four species. 1. WHITE, *betula alba*. The bark of this tree is a substance of a singular kind,

and is perhaps the only bark which is less liable to rot than the wood which it incloses. The whole interior substance of a fallen tree is frequently found rotten, whilst the bark remains sound. This bark is composed of several *laminae*, easily separable, of a firm consistence, thin, flexible, soft and smooth: it may be written upon like paper: it is very inflammable, emitting a vivid flame and a very dense, black smoke, which might easily be collected like lamp black. Of this bark the Indians formed dishes, boxes, and light portable canoes, which they sewed together with slender but tough filaments of the roots of spruce and cedar, cementing the joints with turpentine.—

2. BLACK, *betula nigra*. The heart of this tree is of a beautiful brown, and is frequently split and turned: it makes handsome bedsteads, chairs, and tables. Much of it is exported to Europe. 3. RED OR YELLOW, *betula lenta*. This is chiefly used for fuel, and is much esteemed. 4. ALDER, *betula alnus*. Its bark is much employed in dying a dark brown. The wood, when of a proper size, makes excellent charcoal. It is common in swamps and by the side of rivers and brooks.

OAK. Of this they have four species. 1. BLACK, *quercus nigra*. The inner bark is used for tanning; the timber for the keels of ships. 2. RED, *quercus rubra*. Of this species there are three varieties. 1. The red, which grows sometimes on high and dry land, but delights in a moist soil, and is generally found on the declivities of hills and borders of swamps. The wood of this tree is easily riven, and makes excellent staves for molasses and for dry casks. 2. The swamp oak, which is found in low wet places. It is possessed of greater elasticity than any other oak. Splints of this wood have been substituted for whalebone. 3. Yellow, which grows on hills and dry ridges of land, makes the best of pipe staves and ship timber.* 3. WHITE, *quercus alba*. 4. SHRUB, OR GROUND OAK, *quercus pumila*. It is found on barren hills and plains. It produces a gall, which is evidently the *nidus* of an insect, and has been used as an ingredient in writing ink. There is another oak, called the *chestnut*, or *new-found oak*; but whether it be of a different species, or a variety of either species above mentioned, has not been determined. 5. CHESNUT OAK, *quercus prinus*. Whether this is a different species, or only a variety of either of the species before mentioned, we believe is not yet determined.

* This arrangement of the oak is suggested by Dr. Cutler; In common parlance, the oak, which is used for pipe staves and ship timber, is called the Upland White Oak; it is one of the most useful and valuable trees of the American forest.

6. LIVE OAK, *quercus Virginiana*. BLACK JACK OAK, *quercus aquatica*. The two latter are peculiar to the southern States.

WALNUT. The American species of this genus have been confounded by botanical writers. There are at least three in New-Hampshire. 1. WHITE, OR ROUND NUT HICKORY, *juglans alba*. Its sap is sweet, but does not flow freely. Its wood is smooth and tough, and is much used for gun stocks, axe handles, and walking sticks. 2. SHAG BARK, *juglans cineria* ?* The wood of this tree is not so valuable as the white, but the fruit is preferable, being larger, and having a softer shell. 3. OIL NUT, OR BUTTER NUT. This species has been called by some authors, *juglans alba*, and by others, *juglans nigra*. It differs specifically from both, and therefore Dr. Cutler has given it the distinguishing name of *juglans cathartica*, expressive of the peculiar property of its bark, the extract of which is one of the best cathartics in the *materia medica*. It neither produces gripings, nor leaves the patient costive, and may be made efficacious, without hazard, by increasing the dose. Its operation is kind and safe, even in the most delicate constitutions. It is an excellent family medicine, is well adapted to hospitals, navies, and armies. It was much used by the military physicians in the late war, and it may become a valuable article of exportation. It is said to be one of the best antidotes against the bite of the rattlesnake. The fruit of this tree, when gathered young, in the beginning of July, makes an excellent pickle; when ripe, it is a fattening food for swine: its shell is black, hard and rough: its kernel contains a large quantity of a rich sweet oil:† its wood makes good fencing stuff; and its bark, besides the medicinal virtues which it possesses, has a quality of dying several shades of grey and black.

CHESNUT, *fagus castanea*, is chiefly used for fencing; it is straight, coarse grained, easily riven and very durable; it is sometimes split into staves and heading for dry casks.

* I am uncertain whether this be the *cineria* of authors, and therefore have "added the mark of interrogation. If it be not the *cineria* (to which the characters pretty well agree (it has no specific name." Dr. Cutler.

† In the southern and western parts of the United States, this tree is found in very great abundance. The Indians preserved the oil which they extracted from the nut. Of this we have an early testimony in the journal of Ferdinando de Soto, A. D. 1540. When he came to Chiana, situate near the Apalachian mountains, about the latitude of 34° he "found great store of oil of walnuts, clear as butter, and of good taste." Purchas, vol. v, p. 1539. The Indians of New-England extracted an oil from acorns, by boiling them in water with ashes of *punk*, or the rotten heart of maple. Josselyn's Voyage.

BEACH, *fagus sylvatica*. Of this there are three varieties; the white and the red are used as fuel; the black is small and tough, and is used only for withes and switches.

HORNBEAM, *carpinus betulus*, is a small but tough tree, and is used only for levers, hand spikes and stakes.

BUTTON WOOD, *platanus occidentalis*, is a large tree, but as tough as the hornbeam: it is used for windlasses, wheels and blocks.

PINE, *pinus*. Of this genus they have at least seven species.

1. The WHITE PINE, *pinus strobus*, is undoubtedly the prince of the American forest in size, age, and majesty of appearance. More of this species have been produced in New-Hampshire, and the eastern counties of Massachusetts, than in all America besides. These trees have a very thin sap, and are distinguished by the name of mast pine from the succeeding growth of the same species, which are called saplings. The blossom of this and other pines appear about the middle of June; its *farina* is of a bright yellow, and so subtil that it is exhaled with vapour from the earth, ascends into the clouds and falls with rain, forming a yellow scum on the surface of the water, which the ignorant erroneously call sulphur, from the similarity of its colour.

When a mast tree is to be felled, much preparation is necessary. So tall a stick, without any limbs nearer the ground than eighty or a hundred feet, is in great danger of breaking in the fall. To prevent this, the workmen have a contrivance which they call *bedding* the tree, which is thus executed. They know in what direction the tree will fall, and they cut down a number of smaller trees which grow in that direction; or if there be none, they draw others to the spot, and place them so that the falling tree may lodge on their branches; which breaking or yielding under its pressure, render its fall easy and safe. A time of deep snow is the most favourable season, as the rocks are then covered, and a natural bed is formed to receive the tree. When fallen it is examined, and if to appearance it be found, it is cut in the proportion of three feet in length to every inch of its diameter, for a mast; but if intended for a bowsprit or a yard, it is cut shorter: if it be not found throughout, or if it break in falling, it is cut into logs for the saw mill.

When a mast is to be drawn, as its length will not admit of its passing in a crooked road, a straight path is cut and cleared for it through the woods. If it be cut in the neighbourhood of a large river, it is drawn to the bank and rolled into the water;

or in the winter it is laid on the ice to be floated away at the breaking up of the river in the spring. From other situations masts are now conveyed twenty, thirty or forty miles to the landing-places, at the head of the tide, and as the distance has increased, more safe and easy modes of conveyance have been invented. Formerly, if drawn on wheels, the mast was raised by levers, and hung by chains under the axle. In this case it was necessary to use very strong and heavy chains, and wheels of sixteen or eighteen feet in diameter, that the mast, in passing, might be cleared from the ground, which was often encumbered with rocks and stumps. Now, the common wheels and chains are used, and the largest stick, by a very easy operation, is raised on the axle. To perform this, the wheels being brought near to it, are canted; the axle being set in a perpendicular position, one wheel on the ground and the other aloft; the mast is then rolled over the rim and spokes of the lower wheel, and fastened to the axle; and when it is thus fixed, a chain, which is previously made fast to the opposite side of the upper wheel, is hooked to a yoke of oxen, who, by a jerk, bring down the upper and raise the lower wheel, and thus both are brought into their proper position, with the mast mounted on the axle. They use two pairs of wheels, one at each end of the mast; by which means, it is not galled by friction on the ground, and the draught is rendered much easier for the cattle.

When a mast is to be drawn on the snow, one end is placed on a sled, shorter, but higher than the common sort, and rests on a strong block, which is laid across the middle of the sled. Formerly, the butt-end was placed foremost, and fastened by chains to the bars of the sled, which was attended by this inconvenience; that in sidelong ground, the stick by its rolling would overset the sled, and the drivers had much difficulty either to prevent or remedy this disaster, by the help of levers and ropes. The invention of the swivel-chain precludes this difficulty. One part of this chain is fastened to the tongue of the sled, and the other to the smallest end of the mast, by means of a circular groove cut in it; one of the intermediate links is a swivel, which, by its easy turning, allows the stick to roll from side to side, without overturning the sled. In descending a long and steep hill, they have a contrivance to prevent the load from making too rapid a descent. Some of the cattle are placed behind it; a chain which is attached to their yokes is brought forward and fastened to the hinder end of the load, and the resistance which is made by these cattle checks the descent.

This operation is called *tailing*. The most dangerous circumstance is the passing over the top of a sharp hill, by which means the oxen which are nearest to the tongue are sometimes suspended, till the foremost cattle can draw the mast so far over the hill, as to give them opportunity to recover the ground. In this case the drivers are obliged to use much judgment and care, to keep the cattle from being killed. There is no other way to prevent this inconvenience than to level the roads.

The best white pine trees are sold for masts, bowsprits and yards, for large ships.* Those of an inferior size, partly un-found, crooked or broken in falling, are either sawn into planks and boards, or formed into canoes, or cut into bolts for the use of coopers, or split and shaved into clapboards and shingles. Boards of this wood are much used for wainscoting and cabinet work; it is of smooth grain, and when free from knots, does no injury to the tools of the workmen; but the softness of its texture subjects it to shrink and swell with the weather. The sapling pine, though of the same species, is not so firm and smooth as the veteran pine of the forest, and is more sensibly affected by the weather.

* Douglass, vol. ii. p. 53, speaks of a white pine, cut near Dunstable in 1736, which was "straight and found, seven feet eight inches in diameter, at the butt end." He also says, that when 'Colonel Partridge' (formerly Lieutenant-Governor of New-Hampshire) 'Had the mast contract, he sent home a few of thirty-eight inches, and two of forty-two inches.'

Mr. Belknap obtained from the books of the late contractor, Mark Hunking Wentworth, Esq. deceased, the following account of the size and value of such sticks as he sent to England for the use of the navy.

Masts.			Yards.			Bowsprits.		
Diameter in inches.	Sterling value.		Diameter in inches.	Sterling value.		Diameter in inches.	Sterling value.	
	£.	s.		£.	s.		£.	s.
25	13	8	15	0	0	25	2	10
26	16	0	16	0	0	26	3	0
27	18	0	17	6	10	27	3	14
28	23	0	18	9	0	28	8	2
29	28	0	19	11	4	29	15	0
30	35	10	20	14	10	30	21	0
31	44	0	21	18	10	31	26	0
32	56	0	22	21	0	32	29	0
33	70	0	23	25	10	33	32	0
34	90	0	24	32	0	34	40	0
						35	42	10
						36	45	0
						37	52	10

N. B. It must be observed, that all these were hewn into the proper shape before the final dimensions were taken, which determined their value.

The stumps and roots of the mast pine are very durable. It is a common saying, that "no man ever cut down a pine, and lived to see the stump rotten." After many years, when the roots have been loosened by the frost, they are, with much labour, cut and dug out of the ground, and being turned up edgeway, are set for fences to fields, in which state they have been known to remain sound for half a century. A collection of these roots would make an impenetrable *abbatis*, which nothing but fire could easily destroy.

Before the revolution, all white pines, excepting those growing in any township granted before the twenty-first of September, 1722, were accounted the king's property, and heavy penalties were annexed to the cutting of them, without leave from the king's surveyor. Since that event, these trees, like all others, are the property of the landholder.

2. The YELLOW PINE, *pinus pinea*, is harder and heavier than the white, but never grows to the same size; its planks and boards are used for the floors of houses and the decks of ships.

3. The PITCH PINE, *pinus taeda*, is the hardest and heaviest of all the pines; it is sometimes put to the same uses as the yellow pine; but at present the principal use of it is for fuel. When burnt in kilns, it makes the best kind of charcoal; its knots and roots being full of the terebinthine oil, afford a light surpassing candles; its foot is collected, and used for lamp black. The making of tar from it is now wholly disused. Formerly, when it was made, the method was this: a piece of clay ground was chosen; or if such could not conveniently be had, the earth was paved with stone or brick, in a circular form, about twelve or fifteen feet in diameter, raised in the middle, and a circular trench was drawn round it a few inches in depth. The wood being cut and split, was set upright in a conical pile, and covered on every side with fods, a hole being left open at the top, where the pile was set on fire. The confined heat melted the resinous juices of the wood, which flowed out at the bottom into the circular trench, and was conducted, by other gutters, to holes in the earth, in which were set barrels to receive it. Turpentine is collected from every species of the pine, by boxing the trees; that from the white pine is the purest; it sometimes distils from the tree in beautifully transparent drops.

4. The LARCH, *pinus larix*, is the only tree of the terebinthine quality which sheds its leaves in autumn. Its turpentine is said to be the same with the Burgundy pitch.

5. The *FIR pinus balsamea*, yield a fine balsam, which is contained in small blisters on the exterior surface of its bark. This balsam is used both as an external and internal medicine. The wood is coarser and more brittle than the pine, and is seldom either hewn or sawn.

6. *SPRUCE, pinus Canadensis*; of this they have two varieties, the white and the black. The *white spruce* is tall and slender, its grain is twisting, and when stripped of its bark it will crack in a warm sun; it is the worst wood for fuel, because of its continual snapping; in this respect it exceeds hemlock and chestnut, both which are remarkable for the same ill quality; it is sometimes formed into oars for large boats, but is inferior to ash; it is often used for spars, for fencing stuff and for scaffolding; for all which purposes its form and texture render it very convenient, as it is straight and tough, and may be had of any size from two inches to two feet in diameter. The *black spruce* is used only for beer; the young twigs of it are boiled till the bark may easily be stripped from the wood, and being sweetened with molasses, make one of the most pleasant and wholesome beverages which nature affords: of this spruce is made the essence, which is as well known in Europe as in America.

7. The *HEMLOCK, pinus abies*, is, in stature, the next tree to the mast pine; it grows largest in swampy land, and is very straight; its grain is coarse, and is not easily split or hewn, but is sawed into planks, joists and laths; its chief excellence in building is, that it holds a nail exceedingly well; it makes good flooring for bridges and barns, and the round timber is very durable in wharfs and dams: the bark is excellent for tanning leather. The balsam of the hemlock is used medicinally, but it cannot be collected in any great quantities.

WHITE CEDAR, OR *ARBOR VITÆ, thuja occidentalis*.

JUNIPER, OR RED CEDAR, *juniperus Virginiana*, it produces the juniper berry.

The white cedar of the southern States, *cupressus thyoides*, is a very different tree from the white cedar of the northern States; but the red cedar is the same in all the States; it is a juniper, and is a species of that in European which produces the juniper berries: the wood of the red cedar is more durable, when set in the earth, than any other wood growing in America.

They have another species of juniper, *juniperus sabina*, which does not rise more than eighteen inches from the ground; but the branches extend horizontally several yards, and form, in open pastures, an extensive bed of evergreen: the leaves

are mixed with oats, and given to horses to destroy the worms, which infest their bowels.

CYPRESS, *cupressus disticha*, found only in the southern States, used for shingles and other purposes, grows in swamps and very large.

WHITE WILLOW, *salix alba*, is originally an exotic, but now well naturalised and much propagated. "The bark of this tree is used as a substitute for the *cortex Peruviana*," or Peruvian bark.

SWAMP WILLOW, *salix*; this is the first tree that shews its blossoms in the spring; and in some seasons its white flowers exhibit a delightful appearance, when all the neighbouring trees remain in their wintry hue.

POPLAR OR ASPEN, *populus tremula*. This tree is more frequently found in open or clear land than in thick woods; it is of quick growth; the wood is white, soft and smooth; it is used for lasts and heels of shoes, and for some kinds of turned work.

BLACK POPLAR, or BALSAM TREE. This is a beautiful forest tree, of a large size and quick growth, very proper for walks and shades; its buds, in the spring, are full of a rich balsam, resembling the balsam of Peru: as the buds expand the balsam disappears.

Of the MAPLE they have three species: 1. The WHITE, *acer negundo*; the wood of this tree, especially that which is curled in its grain; is much used in cabinet work; it is firm and smooth; it takes a fine polish, and may be stained of the colour of black walnut or mahogany. 2. The RED, *acer rubrum*, grows in swamps, and is fit only for fuel. 3. The BLACK OR ROCK maple exceeds the others in this respect, being of a very close texture, hard and heavy, even when perfectly dry. But the grand excellency of this tree is the saccharine quality of its sap, which has obtained for it the name of SUGAR MAPLE, *acer saccharinum*.

Of ASH they have two species. 1. The WHITE ASH, *fraxinus excelsior*; this, in good land, grows to the size of three feet in diameter; it is very tall, straight and tough; its leaves and bark are an antidote to the venom of the rattle-snake; the wood is easily riven, and makes durable rails for fences; it is also formed into oars and hand-spikes, and serves for the frames of ploughs, carts, sleighs and riding carriages, and for the handles of many useful tools in agricultural and mechanical employments. 2. The other species is BLACK ASH, *fraxinus Americana*, of which the RED and YELLOW are varieties. Splints of

the wood of ash are obtained by pounding it with a maul, and are employed in making baskets and brooms: this knowledge was probably derived from the Indians. The roots of yellow ash are used by turners for the making of plates and bowls.

After going through the catalogue of forest trees, it may be proper to observe, that all woods which grow on high land are more firm and solid, and better for timber or fuel, than those which grow in swamps: the same difference may generally be observed between those in the open grounds, and those in the thick shade in the forest. The pine is an exception to this remark; but whether the immense age or superior stature of the forest pine be the causes which render it more firm than that which is found in the pastures, cannot at present be ascertained.

From several experiments made by the Count de Buffon, it appears, that the wood of trees, stripped of their bark in the spring, and left to dry standing till they are dead, is harder, heavier and stronger, more solid and durable, than that of trees felled in their bark; and that the sappy part of wood without bark is not only stronger than the common, but much more so than the heart of wood in bark, though less heavy: the physical cause of this augmentation of strength and solidity he thus explains: "Trees increase in size by additional coats of new wood, which is formed from the running sap between the bark and the old wood. Trees stripped of their bark form none of these new coats, and though they live after the bark is taken off, they do not grow. The substance destined to form the new wood, finding itself stopped and obliged to fix in the void places both of the sap and heart, augments the solidity and consequently the strength of the wood."*

Beside the immense quantity of living wood with which the forest abounds, nature hath provided an ample store of that fossil, ligneous substance, called *peat*. It appears to be formed of the deciduous parts of trees and shrubs, preserved in a peculiar manner in the earth; it is usually found in swamps between or under hills, where it has been accumulating for many ages; the decayed vegetation of one period having served as a soil in which another growth has taken root and come to maturity. In the town of Dover, in New-Hampshire, are two swamps,

* Nat. Hist. Vol: v. p. 267. It must be observed, that his experiments were made on oaks.

which, within the last twenty-five years, have been cleared of the stumps and roots of the latest growth, which were pine and hemlock. In digging them up another tier of stumps was found under them, the roots of which were found; and in some instances a third stump appeared under the second. In such swamps is found the peat, in which the shape of twigs, bark and leaves, is very apparent, but on pressure it is consolidated into a soft fatty substance: this being dug in spits of a proper size, and dried becomes valuable fuel; of which, though at present little use is made, yet posterity will doubtless reap the benefit.*

* The following letter on the subject of peat, though in opposition to the above principal of its origin, will need no apology for its insertion; it appears to us sufficiently important to claim the attention of the naturalist, and calculated to promote an inquiry that may be attended with many beneficial consequences:

"I very much doubt your doctrine of peat. It appears to me to be a substance *sui generis*. Deciduous parts of trees and shrubs are often found mixed with it. But its inflammable property, I conceive, does not depend on the mere adventitious collections of decayed vegetables; for although peat is found in places favourable to such collections, yet it is not found in every place where those collections have been made. Besides, in all the peat I have examined, there are numerous fibres, of a singular construction, variously ramified; in some kinds they are extremely fine, in others as large as a packthread. When the peat is first taken from the pit, the threads may be traced a considerable length, and, when washed, they have an appearance which has induced me to suspect a vegetable organization. If they are a living vegetable, they seem to form the link between the vegetable and fossil kingdom. It seems most probable, if those fibres are not vegetable *sui generis*, they may be fibrous roots of a bed of some particular species of moss, upon which there has been a large collection of matter, which has buried them a certain depth under ground, where they are not subject to putrefaction. But there seems to be an inflammable fossil in the composition of peat, different from the earth commonly found in similar places. I am told, some peat appears to be entirely a fossil, though I have never seen any such. It is as easy to conceive of such a fossil as of pit-coal. If the fossil contains the inflammable principle, it is not derived from deciduous vegetables. Have you never heard of its growing again where it has been dug out? One of my neighbours has often told me, that a ditch was dug through a meadow in his farm many years ago, where there is a body of peat; that the depth of the ditch exceeded the depth of the peat; and that the peat has pushed out on both sides so as nearly to meet in the center, but the sides of the ditch above and below remain much the same, except some little change which the length of time has produced. I have not seen the place; but were I assured of this fact, I should be inclined to believe the fibres to be living vegetables, and the fossil to be possessed of the property of spar, with regard to the increase of its bulk; and that these two substances were mutually dependent on each other."

MS. letter of Dr. Cutler to Mr. Belknap.

FLOWERING TREES, SHRUBS, &c.

Globe flower,	-	-	<i>Cephalanthus occidentalis</i> ,
Pigeonberry,	-	-	<i>Cissus sicyoides</i> ,
Virginia dogwood,	-	-	<i>Cornus florida</i> ,
Conel,	-	-	<i>Cornus Canadensis</i> ,
Red-flowered honeysuckle,			<i>Azalea nudiflora</i> ,
White American honeysuckle,			<i>Azalea viscosa</i> ,
American tea	-	-	<i>Ceanothus Americanus</i> ,
Cherry honeysuckle,	-	-	<i>Lonicera diervilla</i> ,
Virginia scarlet honeysuckle,			<i>Lonicera Virginiana</i> ,
Dwarf cherry honeysuckle,			<i>Lonicera Canadensis</i> ,
Evergreen spindle tree,			<i>Eucnymus Americanus</i> ,
Virginian itea,	-	-	<i>Itea Virginica</i> ,
Stag's horn sumach,	-	-	<i>Rhus typhinum</i> ,
Black haw,	-	-	<i>Viburnum prunifolium</i> ,
Blackberried elder,	-	-	<i>Sambucus nigra</i> ,
Redberried elder,	-	-	<i>Sambucus Canadensis</i> ,
Scarlet-flowered horse chestnut,			<i>Æsculus pavia</i> ,
Judas tree,	-	-	<i>Cercis Canadensis</i> ,
Great laurel,	-	-	<i>Kalmia latifolia</i> ,
Dwarf laurel,	-	-	<i>Kalmia angustifolia</i> ,
Thyme-leaved marsh cistus,			<i>Ledum thymifolium</i> ,
American fenna,	-	-	<i>Rhodora Canadensis</i> ,
Rose bay tree,	-	-	<i>Rhododendrum maximum</i> ,
White pepper bush,	-	-	<i>Andromeda arborea</i> ,
Red-bud andromeda,	-	-	<i>Andromeda racemosa</i> ,
Bog evergreen,	-	-	<i>Andromeda calyculata</i> ,
Carolina red-bud,	-	-	<i>Andromeda nitida</i> ,
Carolina iron-wood tree,			<i>Andromeda plumata</i> ,
Carolinian lyrianga,	-	-	<i>Philadelphus inodorus</i> ,
Sorbus tree,	-	-	<i>Sorbus aucuparia</i> ,
Mountain ash,	-	-	<i>Sorbus Americana</i> ,
Service tree,	-	-	<i>Mespilus Canadensis</i> ,
Medlar tree,	-	-	<i>Mespilus nivea</i> ,
Sweet-cented crab apple-tree,			<i>Pyrus coronaria</i> ,
Meadow sweet,	-	-	<i>Spiræa salicifolia</i> ,
Queen of the meadows,			<i>Spiræa tomentosa</i> ,
Canadian spiræa,	-	-	<i>Spiræa hypericifolia</i> ,
Wild rose,	-	-	<i>Rosa Carolina</i> ,
Pennsylvanian swamp rose,			<i>Rosa palustris</i> ,
Superb raspberry,	-	-	<i>Rubus odoratus</i> ,
Carolan Fothergilla,	-	-	<i>Fothergilla gardeni</i> ,
Tulip tree,	-	-	<i>Liriodendrum tulipifera</i> ,

Evergreen tulip tree,	-	Magnolia grandiflora,
Climing trumpet flower,		Bignonia radicans,
Virginian stewartia,	-	Stewartia malacodendron,
Franklin tree,	-	Franklinia alatamaha,
Locust tree,	-	Robinia pseudo acacia,
Rose-flowered locust tree,		Robinia rosea,
Swamp willow,	-	Salix cineria?
Red-flowered maple,	-	Acer rubrum,
Plane-tree,	-	Plantanus occidentalis,
Poplar,	-	Liriodendron tulipifera,
		Populus heterophylla,
Catalpa,	-	Bignonia catalpa,
Umbrella,	-	Magnolia tripetala,
Swamp laurel,	-	Magnolia glauca,
Cucumber tree,	-	Magnolia acuminata,
Portugal bay,	-	Laurus indica,
Red bay,	-	Laurus borbonia,
Laurel of the western country,		Qu. species?
Wild pimento,	-	Laurus benzoin,
Sassafras,	-	Laurus sassafras,
Honey-locust,	-	Gleditsia,
Fringe or snow-drop tree,		Chionanthus Virginica,
Barberry,	-	Berberis vulgaris,
Holly,	-	Ilex aquifolium,
Cockspur hawthorn,	-	Cratægus coccinea,
Spindle-tree,	-	Euonymus Europæus,
Papaw,	-	Annona triloba,
Candleberry myrtle,	-	Myrica cerifera,
Dwarf-laurel,	-	Kalmia angustifolia,
		Kalmia latifolia,*
Ivy,	-	Hedera quinquefolia,
Trumpet honeysuckle,	-	Lonicera sempervirens,
Upright honeysuckle,	-	Azalea nudiflora,
Yellow jasmine,	-	Bignonia sempervirens,
		Calycanthus floridus,
American aloe,	-	Agave Virginica,
Sumach,	-	Rhus, Qu. species?
Poke,	-	Phytolacca decandra,
Long moss,	-	Tillandsia Usneoides.

* Called ivy with us.

WILD FRUITS.

Black currant,	-	-	<i>Ribes nigrum</i> ,*
Gooseberry,	-	-	<i>Ribes groffularia</i> ,†
Prickly gooseberry,	-	-	<i>Ribes cynosbati</i> ,
Grapes,	-	-	<i>Vitis</i> ,
The black grape,	-	-	<i>Vitis labrusca</i> ,
Fox grape,	-	-	<i>Vitis vulpina</i> ,‡
Barberry bush,	-	-	<i>Berberis vulgaris</i> ,
Whortleberry,	-	-	<i>Vaccinium ligustrinum</i> ,
Dirto,	-	-	<i>Vaccinium uliginosum</i> ,
Blueberry,	-	-	<i>Vaccinium corymbosum</i> ,
White whortleberry,	-	-	<i>Vaccinium album</i> ,§
Indian gooseberry,	-	-	<i>Vaccinium frondosum</i> .
Long-leaved whortleberry,	-	-	<i>Vaccinium fluminense</i> .
Craneberry,	-	-	<i>Vaccinium oxycoccos</i> ,

* The BLACK CURRRANT, *ribes nigrum*, is a native of the American swamps, and is much improved by culture ; it is not much used as food, but is an excellent medicine for a sore mouth and throat. An excellent wine may be made from the fruit ; we have drank some of the age of seven years equal to the best flavoured port.

† The WILD COOSEBERRY, *ribes groffularia*, is very common in the borders of woods, and has been greatly meliorated by cultivation.

‡ Of grapes they have two species. The BLACK GRAPE, *vitis labrusca*, and the FOX GRAPE, *vitis vulpina*. Of these there are several varieties. From the specimens of foreign grapes, which ripen in their gardens, there is sufficient reason to believe that the culture of vines, in favourable situations, might be attended with success. This opinion is corroborated by the judgment of foreigners occasionally resident in America. Wine, and in large quantities, has lately been made by the French people at their new settlement on the Ohio river, from the native grapes, without any kind of cultivation. They collected the grapes promiscuously from all the varieties growing in that country. By separating them, wines of different, and no doubt some of them of a much better quality, might have been made. The native grape is propagated with great ease ; its growth is luxuriant, overspreading the highest trees* in the forests, and by proper attention would afford an ample supply of wines in the northern as well as southern States. The principal difficulty seems to be the want of a proper knowledge of the process in making wine, and preparing it for use. As far as possible to remedy this, and to render the cultivation of the vine and the making of wines more an object of attention, we shall in another part of this work enter more fully into the subject.

§ The Americans have several species of WHORTLEBERRY, *vaccinium corymbosum*, which grow in great abundance, and serve as wholesome and palatable food ; some of them are dried for winter.

|| The CRANEBERRY, *vaccinium oxycoccos*, is a fruit peculiar to America. The common species grows on a creeping vine in meadows. The branches of the vine take root at the joints, and overspread the ground to the extent of an acre. The berries hang on very slender stalks ; at first they are white, but turn red as

Yellow plum,	-	-	<i>Prunus Americana</i> ,
Beach plum,	-	-	<i>Prunus maritima</i> ,
Cherokee plum,	-	-	<i>Prunus sylvestris fructu majori</i> ,
Wild plum,	-	-	<i>Prunus sylvestris fructu minori</i> ,
Large black cherry,	-	-	<i>Prunus nigra</i> ,
Purple cherry,	-	-	<i>Prunus Virginiana</i> ,
Wild red cherry,	-	-	<i>Prunus rubra</i> ,
Dwarf or choak cherry,	-	-	<i>Prunus Canadensis</i> ,
Mountain cherry,	-	-	<i>Prunus montana</i> ,
Service-tree,	-	-	<i>Mespilus Canadensis</i> ,
Brambleberry,	-	-	<i>Rubus occidentalis</i> ,*
Sawteat blackberry or bumble-			
kites,	-	-	<i>Rubus fruticosus</i> ,
Briar blackberry,	-	-	<i>Rubus moluccanus</i> ,
Dewberry,	-	-	<i>Rubus hispidus</i> ,
Common raspberry,	-	-	<i>Rubus idæus</i> ,†
Smooth-stalked raspberry,	-	-	<i>Rubus Canadensis</i> ,
Superb raspberry,	-	-	<i>Rubus odoratus</i> ,
Strawberry,	-	-	<i>Fragaria vesca</i> ,‡
Scarlet strawberry,	-	-	<i>Fragaria Virginiana</i> , Jeff.§
Mulberry,	-	-	<i>Morus nigra</i> ,
Red mulberry.	-	-	<i>Morus rubra</i> ,
Crab apple,	-	-	<i>Pyrus coronaria</i> .

they ripen, and when full grown are of the size of a cherry. They yield an agreeable acid juice, and, when stewed and made into a jelly, are extremely cooling in a fever, and a delicious sauce at the table. They may be kept a long time in water, and suffer no injury from the frost. They are frequently sent abroad, and are highly refreshing at sea. The best way to preserve them for long voyages, is to put them up clean and dry, in bottles closely corked. There is another species of craneberry, which grows in clusters on a bush, but it is not so large nor so common as the other.

* The BRAMBLEBERRY, *rubus occidentalis*. The RUNNING BLACKBERRY, *rubus moluccanus*. The UPRIGHT BLACKBERRY, *rubus fruticosus*, are also very common, especially in the newly cleared land, and afford an agreeable refreshment.

† The common RASPBERRY, *rubus idæus*, is found in the most exuberant plenty in the new plantations, and in the old, by the sides of fields and roads. The SUPERB RASPBERRY, *rubus Canadensis*, is larger and more delicate. Its blossom is purple, and its leaves are sometimes a foot in diameter.

‡ The STRAWBERRY, *fragaria vesca*, in some parts of the country, is very luxuriant in new fields and pastures, but it is capable of great improvement by cultivation.

§ The native strawberry is much improved by cultivation, and produces a larger and better-flavoured fruit than the exotic.

|| This is a genuine and distinct species of the apple; it grows in all parts of North-America which have been explored, from the Atlantic as far west as the

POISONOUS PLANTS.

The following indigenous vegetable productions, under certain circumstances, operate as poisons; some of which, however, have been brought into medicinal use, and reputed for the cure of disorders attended with spasmodic affections. HEMLOCK, *cicuta*; the THORN APPLE, *datura stramonium*; the HENBANE, *hyoscyamus niger*; and the NIGHT SHADE, *solanum nigrum*. Other poisonous plants, are the IVY, *hedera helix*; the CREEPING IVY, or, as it is called by some, MERCURY, *rhus radicans*, the juice of which stains linen a deep and indelible black; the SWAMP SUMACH, *rhus toxico dendrum*; the WATER ELDER, *viburnum opulus*; the HERB CHRISTOPHER, *asclea spicata*; the STINKING SNAKEWEED, *cliffortia trifoliata*; and the WHITE HELLEBORE, *veratrum album*.

NUT FRUIT.

White oak,	-	Quercus alba,
Red oak, and several other species with smaller fruit,		Quercus rubra,
Black walnut,	-	Juglans nigra,
Butternut, or oilnut,		Juglans cathartica,
White, or round nut hiccory,		Juglans alba,
Shag-bark hiccory,		Juglans cineria,*
Chestnut,	- -	Fagus castanea,
Chinquipin, or dwarf chestnut,		Fagus pumila,
Beech nut,	- -	Fagus sylvatica,
Hazlenut,	- -	Corylus avellana,
Filbert,	- -	Corylus cornuta.

We may here mention the paccon or Illinois nut,—juglans, alba, foliolis lanceolatis, acuminatis, ferratis, tomentosis, fructu, minore, ovato, compresso, vix. insculpto, dulci, putamine, tenerimo.—*Jefferson*. This nut is about the size of a large, long acorn, and of an oval form; the shell is easily cracked, and the kernel shaped like that of a walnut. The trees which bear this fruit grow, naturally, on the Mississippi and its branches, south of forty degrees north latitude. They grow well when planted in the southern Atlantic States.

Mississippi; its blossoms are remarkably fragrant; its fruit small. possessing perhaps of all others the keenest acid. The European crab is a very different fruit. It makes an excellent vinegar, and the cyder made from it is much admired by those who profess to be connoisseurs in that article.

* The same, probably, as Clayton's Scaly bark hiccory of Virginia.—juglans alba cortice squamoso.

EXOTIC FRUITS.

Of these, apples are the most common in the United States. They grow in the greatest plenty and variety in the eastern and middle States; and the cyder which is expressed from them, affords the most common and wholesome liquor that is drank by the inhabitants.

The other exotic fruits are pears, peaches, quinces, mulberries, plums, cherries, currants, barberries, all of which, except quinces and barberries, they have many species and varieties. These, with a few apricots and nectarines, flourish in the eastern States, and are in perfection in the middle States.*

The exotic fruits of the southern States, besides those already mentioned, are figs, oranges, and lemons.

MEDICINAL PLANTS.

Among the native and uncultivated plants of New-England, the following have been employed for medicinal purposes:

Water horehound,	-	<i>Lycopus Virginica</i> ,
Blue flag,	-	<i>Iris Virginica</i> ,
Skunk cabbage,	-	<i>Arum Americanum</i> , Catelb. and <i>Dracontium foetidum</i> , Linn,
Partridge berry,	-	<i>Mitchella repens</i> ,
Great, and marsh plantain,	-	<i>Plantago major et maritima</i> ,
Witch hazel,	-	<i>Hamamelis Virginica</i> ,
Hound's tongue,	-	<i>Cynoglossum officinale</i> ,
Comfrey,	-	<i>Symphytum officin</i> ,
Bear's ear fanicle,	-	<i>Cortusa gmelini</i> ,
Appleperu,	-	<i>Datura stramonium</i> .
Bittersweet,	-	<i>Solanum dulcamare</i> ,
Tivertwig, or Amer. mazerion,	-	<i>Celastrus scandens</i> ,
Elm,†	-	<i>Ulmus Americana</i> ,
Great laferwort, & wild angelica,	-	<i>Laserpitium trilobum</i> , et <i>latifolium</i> ,
Angelica, or Amer. masterwort,	-	<i>Angelica lucida</i> ,

* "In regard to tree fruit," says Dr. Tenny of Exeter, in New-Hampshire, in a letter to Dr. Belknap, "we are in too northern a climate to have it of the first quality, without particular attention. New-York, New-Jersey, and Pennsylvania, have it in perfection. As you depart from that tract, either southward or northward, it degenerates. I believe, however, that good fruit might be produced even in New-Hampshire, with suitable attention."

Belknap's History N. H. Vol. III. p. 140.

† The bark of the sweet-elm is a most excellent mucilage.

Water elder,	-	-	<i>Virburnum opulus,</i>
Elder,	-	-	<i>Sambucus nigra,</i>
Chickweed,	-	-	<i>Alfina media,</i>
Pettimorrel, or life of man,			<i>Aralia racemosa,</i>
Sarsaparilla,	-	-	<i>Aralia nudicaulis?</i>
Marsh rosemary,	-	-	<i>Statice limonium,</i>
Sundew,	-	-	<i>Drosera rotundifoli,</i>
Solomon's seal,	-	-	<i>Convallaria stellata?</i>
Adder's tongue,	-	-	<i>Convallaria bifolia,</i>
Unicorn,	-	-	<i>Aletris farinosa,</i>
Sweet flag,	-	-	<i>Acorus calamus,</i>
Several species of dock,			<i>Rumex,</i>
Bistort,	-	-	<i>Polygonum bistorta,</i>
Spice wood, or fever bush,			<i>Laurus benzoin,</i>
Sassafras,	-	-	<i>Laurus sassafras,</i>
Consumption root,	-	-	<i>Pyrola rotundifolia,</i>
Rheumatism weed,	-	-	<i>Pyrola minor,</i>
Moufe ear,	-	-	<i>Cerastium viscosum,</i>
Gargit, or skoke,	-	-	<i>Phytolacca decandria,</i>
Wild hyssop,	-	-	<i>Lythrum hyssopis,</i>
Agrimony,	-	-	<i>Agrimonia eupatoria,</i>
Common avens, or herb bennet,			<i>Geum Virginia,</i>
Water avens, or throat root,			<i>Geum rivale,</i>
Blood root, or puccoon,			<i>Sanguinario Canadensis,</i>
Celandine,	-	-	<i>Chelidonium majus,</i>
Yellow water lily,	-	-	<i>Nymphaea lutea,</i>
Pond lily,	-	-	<i>Nymphaea alba,</i>
Golden thread, or mouth root,			<i>Nigella?</i>
Liverwort,	-	-	<i>Anemone hepatica,</i>
Crowsfoot,	-	-	<i>Ranunculus Pennsylvania,</i>
Germander,	-	-	<i>Teucrium Virg.</i>
Catmint, or catnip,	-	-	<i>Nepea catarita,</i>
Head Betony,	-	-	<i>Betonica officinalis,</i>
Horsemint, spearmint, water mint, and pennyroyal,			<i>Mentha spicata, viridis, aquatica, et pulegium,</i>
Ground ivy, or gill go over the ground,	-	-	<i>Glechoma hederacea,</i>
Hedge nettle,	-	-	<i>Stachys sylvatica,</i>
Horehound,	-	-	<i>Marrubium vulgare,</i>
Motherwort,	-	-	<i>Leonurus cardiaca,</i>
Wild majoram,	-	-	<i>Origanum vulgare,</i>
Wild lavender,	-	-	<i>Trichostema?</i>
Wood betony,	-	-	<i>Pidicularis Canadensis,</i>

Shepherds's purse, or pouch,		<i>Thalapsi bursa pastoris,</i>
Water cresses,	- -	<i>Sisymbrium nasturtium,</i>
Cranes bill,	- -	<i>Geranium macrorrhizum,</i>
Marsh mallow,	- -	<i>Althæa officin,</i>
Mallow,	- -	<i>Malva rotundifolia,</i>
Succory,	- -	<i>Crepis harbata,</i>
Burdock,	- -	<i>Actium lappa,</i>
Devil's bit,	- -	<i>Serratula amara,</i>
The root resembles the Europe-		
an devil's bit,	- -	<i>Scabiosa succisa,*</i>
Tansy,	- -	<i>Tanacetum vulgare,</i>
Wormwood,	- -	<i>Artemisia absinthiani,</i>
Life everlasting,	- -	<i>Gnaphalium odoratissimum?</i>
Colts foot,	- -	<i>Tussilago farfara,</i>
Golden rod,	- -	<i>Solidago Canad.</i>
Elecampane,	- -	<i>Inula helenium,</i>
Mayweed,	- -	<i>Anthemis cotula,</i>
Yarrow,	- -	<i>Achillea millefolia,</i>
American pride,	- -	<i>Lobelia cardinalis,</i>
Three other species of lobelia,		<i>Lobelia dortmanna, kilmii, et</i>
		<i>sphilitica,</i>
Dragon root,	- -	<i>Arum Virginia,</i>
Stinging nettle,	- -	<i>Urtica urens,</i>
White walnut, butter nut, or		
oilnut,	- -	<i>Juglans cathartica,</i>
Swamp willow,	- -	<i>Salix cinerea?</i>
Sweet gale,	- -	<i>Myrica gale,</i>
White hellebore, or pokeroor,		<i>Veratrum album,</i>
Moonwort,	- -	<i>Osmunda luneria,</i>
Female fern,	- -	<i>Pteris caudata,</i>
Hearts tongue,	- -	<i>Asplenium scolopendrium,</i>
Spleenwort,	- -	<i>Asplenium salicifolium,</i>
Black maidenhair,	- -	<i>Asplenium adiantum,</i>
Arsmart,	- -	<i>Polygonum sagittatum. Linn.</i>
Pink root,†	- -	
Senna,	- -	<i>Cassia ligustrina,</i>
Clivers, or goose grass,	- -	<i>Galium spurium,</i>
Palma Christi,	- -	<i>Ricinus,‡</i>
Several species of mallow, In-		
dian physic,	- -	<i>Spiræa trifoliata,</i>

* From which circumstance the English name has probably been applied to this plant.

† An excellent vermifuge.

‡ From which the castor oil is expressed.

Euphorbial ipecacuanhæ, pleu-

rify root,	-	-	<i>Asclepias decumbens</i> ,
Virgine snake root,	-	-	<i>Aristolochia serpentaria</i> ,
Black snake root,	-	-	<i>Actæa racemosa</i> ,
Seneca rattle-snake root			<i>Polygala Senega</i> ,
Valerian,	-	-	<i>Valeriana locusta radiata</i> ,
Ginseng,	-	-	<i>Panax quinquefolium</i> ,
Angelica	-	-	<i>Angelica sylvestris</i> ,
Cassava,	-	-	<i>Jatropha urens</i> .

CULTIVATED GRASSES.

All the grasses, cultivated in the middle, and New-England States, are found growing indigeous. It is not improbable, however, that some of them may be naturalized exotics. The following are the principal grasses sown in the cultivated ground, or in any way propagated for seed and hay ;

Herd's grass, or fox tail,		<i>Alopecurus pratensis</i> ,*
Blue grass,	-	<i>Alopecurus geniculatus</i> ,
Many species of bent,		<i>Agrostis</i> ,
Rhode-Island bent,	-	<i>Agrostis interrupta</i> ,
The small and great Eng. grass,		<i>Poa trivialis et pratensis</i> ,
Wire grass,		<i>Poa compressa</i> ,
Fowl meadow grass,	-	<i>Poa aviaria, spiculis subifloris</i> ,†
Red and white clover,	.	<i>Trifolium pratense et repens</i> .

The grasses of Virginia, according to Mr. Jefferson, are lucerne, saint foin, burnet, timothy, ray, and orchard grass, red, white, and yellow clover ; greenfwerd, blue grass and crab grass. South of Virginia very little attention is paid to the cultivation of grasses. The winters are so mild, that the cattle find a tolerable supply of food in the woods.

NATIVE GRASSES.

Besides the cultivated grasses, the States of New-England abound with a great variety which are found growing in their native soils and situations, many of which have not been described by any botanical writers. The small experiments which have been made, sufficiently evince that Several of them make

* This is reckoned the best grass the Americans have, is a native, and supposed to be peculiar to the eastern and middle States.

† "The fowl meadows, on Neponset river, between Dedham and Stoughton, are considered by some a curiosity. A large tract of land is there cleared and sowed with an excellent kind of grass, without the assistance of man."

excellent hay. They might be greatly improved by cultivation, and are highly worthy the attention of farmers. Those which are found most common are the following, viz.

The vernal grafs,	-	-	Anthoxanthum odoratum,
Timothy, or bulbus cat's tail			
grafs	-	-	Phleum pratense,
Several species of panic grafs,			Panicum,
Several species of bent,	-		Agrostis,
Hair grafs,	-	-	Aira aquatica,
Numerous species of <i>poa</i> —qua-			
king grafs, several species,			Briza,
Cock's foot grafs,	-	-	Dactylis glomerata,
Miller,	-	-	Milium effusum,
Fescue grafs, many species,			Festuco,
Oat grafs,	-	-	Avena spicata,
Reed grafs, several species,			Arundo,
Brome grafs,	-	-	Bromus squarrosus,
Lime grafs,	-	-	Elymus hystrix,
Barley grafs,	-	-	Hordeum pratense,
Dog's, or couch grafs,	-		Triticum repens,
Many species of rush grafs,			Juncus,
Numerous species of <i>carex</i> , in			
fresh and salt marshy ground,			
Several species of beard grafs,			Andropogan,
Soft grafs,	-	-	Holcus lanatus et odoratus.*

PULSE AND HORTULINE PLANTS AND ROOTS.

Besides those transplanted from Europe to America, of which they have all the various kinds that Europe produces, the following are natives of this country :

Potatoes,	-	-	Solanum tuberosum.
Ground nuts, a sort of potatoe, probably a species, highly relish-			
ed by some people,			
Tobacco,	-	-	Nicotiana,
Pumpkins,	-	-	Cucurbita pepo,
Cymlings.	-	-	Cucurbita verrucosa,
Squashes,	-	-	Cucurbita melopepo,
Cantelope melons, beans, peas, hops. Probably others.			

* Besides these, there are many valuable grasses, which, at present, are none
descrip'ts.

CULTIVATED GRAIN.

Indian corn, *zea mays*, a native grain of North-America. The varieties of this grain, occasioned by a difference in soil, cultivation, and climate, are almost endless.* Winter and summer rye, *secale cereale*, *hybernum et vernum*, the only species cultivated by the American farmers. The winter rye succeeds best in ground newly cleared, but summer rye is frequently sown in old towns, where the land has been long under cultivation. The winter and summer rye are the same species, forming two varieties; but the winter and summer wheat are two distinct species. Several species of barley are cultivated; the most common is the six, ranked *hordeum hexastichon*; and the two, ranked *hordeum distichon*. The wheat principally cultivated are the winter and summer *triticum hybernum et æstivum*. Oats, *avena sativa*. Buck wheat, *polygonum fagopirum*.

In the southern States, as far north as Virginia, where the lands are suitable, besides the grain already mentioned, they cultivate rice. This grain was brought into Carolina first by Sir Nathaniel Johnson, in 1688; and afterwards more, and of a different kind, probably a variety, was imported by a ship from Madagascar, in 1696; till which time it was not much cultivated. It succeeds well also on the Ohio river, where it is planted both on the high and low grounds, and in the same fields with Indian corn and other grain. A gentleman who had planted it several years in his garden, informed Dr. Cutler that it yielded at the rate of eighty bushels an acre. At Marietta, it has answered the most sanguine expectations of the inhabitants, producing equal to any other grain, without being at any time overflowed with water. The doctor himself saw it growing in a very flourishing state, on high land, but it had not, at the season he saw it, begun to bloom. It was said not to be of the same species of Carolina rice, its probably the wild rice, which we have been informed grows in plenty, in some of the interior parts of North-America, and, is the most valuable of all spontaneous productions of the country. In Pennsylvania

* Of all the different kinds of Indian corn, botanists have been able to find but one *species*. The difference in this *genus* of plants is probably accidental, owing to the above mentioned causes. It is possible, however, that among these *varieties*, *specific* characters may yet be found. What is called the *spiked Indian corn* is probably only a *variety*. The plant commonly known in the southern States by the name of *Guinea corn*, is of the family of grasses, as are rye, wheat, barley, oats, &c.

grows a sort of grain, called by the Germans *spelts*, which resembles wheat, and is a very valuable grain.

The above lists are all of them imperfect, and many of them contain but a small proportion in their respective classes of the produce of the States; they are, however, all that can be procured till Dr. Cutler and Dr. Mitchell finish the work they have undertaken, and thus bring us better acquainted with the vegetable productions of America.

To the foregoing we subjoin a catalogue of such foreign plants as have not been cultivated, or at most but partially, in the United States, but which are worthy of being encouraged in America for the purposes of medicine, agriculture and commerce. From a pamphlet by John Ellis, F. R. S. presented by the Honourable Thomas Penn, Esq. to the American Philosophical Society, through the hands of Samuel Powell, Esq.

Latin Names.	English Names	Observations.
<i>Rubia perigrina</i>	Turkey madder	The first is supposed to be the same that is now cultivated in Smyrna for a crimson dye.
<i>Rubia tinctorum</i>	Dyers madder*	
<i>Quercus suber</i>	Cork-bearing oak	Grows in the southern parts of France, Spain, and Portugal.
<i>Quercus ægilops</i>	Avellanea or valenida oak	The cups of the acorns, which are very large, and used in dying, grow in Greece and Naxos, particularly in the island of Zia in the Archipelago, where Tournefort says they gather in one year 5000 cwt.
<i>Quercus gallifera</i>	Gall-bearing oak	Galls from Aleppo and Smyrna. This oak is not yet known in England: the acorns may be brought over in wax, and sent to the southern States.

* This plant is a native of the warmest parts of Europe, and is better calculated for the climate of the southern States than either of Holland or England, where it is cultivated; but principally in the former, from whence England is chiefly supplied with this valuable dye. The chemists say, and with reason, that the warmth of the climate exalts the colour. If so, it may be well worth attention to encourage the planting of so valuable an article of commerce in a climate and soil that seems so much better adapted to it, where the land is cheap, and where vegetation is so much quicker and more luxuriant; and while they encourage the growth of it, they may have the advantage of manufacturing this valuable commodity at home.

Latin Names.	English Names.	Observations.
<i>Carthamus tinctorius</i>	Safflower	Much used in dying, grows in Egypt.
<i>Rhamus catharticus minor</i> <i>Rhamus saxatilis</i>	Buckthorn that produce yellow berries of Avignon	Used by painters and dyers; both these plants produce berries fit for this purpose.
<i>Olea Europa</i>	Olives of several varieties	For oil; these grow in France, Spain, & Italy. Young plants and ripe fruit of the French and Spanish sorts, may be carried from thence.
<i>Sesamum orientale</i>	Oily grain	Propagated in the Levant for oil, which does not soon grow rancid by keeping.
<i>Gossypium herbaceum</i> <i>Gossypium hirsutum</i>	Two sorts of annual cotton	Both these kinds of annual cotton are yearly sown in Turkey, and would grow well in Georgia, Carolina, Virginia, &c.
<i>Salsola soda</i> <i>Salsola fativa</i> and <i>chenopodium maritimum</i>	These kinds of glasswort for barilla	These are sown yearly in fields near the sea in Spain, for making barilla, for soap, glass, &c.
<i>Ceratonia siliqua</i>	Locust tree, or St. John's bread	The pods are excellent food for hard working cattle, and used for this purpose on the sea coast of Spain, where they are easily propagated from seeds or cuttings.
<i>Pistachia vera</i>	Pistachia tree	They are propagated about Aleppo, where the female or fruit-bearing ones are ingrafted on stocks raised from the nuts.
<i>Pistachia terebinthus</i>	Chio turpentine tree	This kind of turpentine is used in medicine.
<i>Pistachia lentiscus</i>	Mastic tree	Gum mastic from the isle of Scio; as this tree, commonly called lentiscus, is doubted to be the genuine mastic tree, seeds of the true kind may be procured from the isle of Scio.

Latin Names.	English Names	Observations.
* <i>Styrax officinale</i>	Gum storax tree	This tree grows in Italy, Syria, and India; but the warmer climates yield the best gum.
<i>Convolvulus scammonia</i>	Gum scammony	Seeds of the plant, from whence this excellent drug is procured, were sent into England from Aleppo, by the late Dr. Alex. Ruffel: it bears the climate very well, and produces seed in hot summers, but requires the warmer climates of Carolina, Georgia, &c. to make the gum resin that flows from it a beneficial article of commerce. It is so frequently adulterated in Turkey, that, to have it genuine, it is well worth propagating in the U. States.
<i>Papaver somniferum</i>	True opium poppy	This is recommended to be sown in the southern States for the sake of obtaining the opium pure.†
<i>Cassia fenna</i>	Alexandrian purging fenna	This grows in Upper Egypt, and is brought from thence to Alexandria; it would not be difficult to procure the seeds of this useful drug.
<i>Croton sebiferum</i>	Tallow tree of China	This plant grows in moist places in China, and is of great use in that country.

* There is a resinous juice, which by age hardens into a solid brittle resin, of a pungent, warm, balsamic taste, and very fragrant smell, not unlike the storax calamita, heightened with a little ambergris, which is produced from the *styrax aceris folio* of Ray, or *liquidambar styraciflua* of Linnæus Spec. plant. 1418, which grows in perfection in the Floridas. This, Dr. Lewis, in his *Materia Medica*, p. 553, says, might be applied to valuable medicinal purposes.

The French, in Du Pratz' history of Louisiana, speak with rapture of its healing qualities, and the high esteem it is in among the Indians of Florida, on account of its infinite virtues: it is known to the English by the name of the sweet gum tree, and to the French by the name of copalm. This is well worth the attention of physicians, as they can have it genuine, whereas the storax from the east is often adulterated.

† The seed of this species of poppy is recommended by a physician of great eminence as proper for the same purposes of medicine as sweet almonds are used. It is observed not to have the least degree of a narcotic quality in it.

Latin Names.	English Names.	Observations.
Rheum palinatum	True rhubarb	The seed of this plant was bro't to England by Dr. Mounsey, F. R. S. from Moscow, and appears by experiment to be the genuine true rhubarb of the shops, and is a most valuable acquisition to a country, as it will grow well in a deep rich soil, inclining to a sandy or gravelly loam, but not in too wet a situation, and may be cultivated in the warm parts of the States.
Calamus rotang pterocarpus draco dracæna draco	Three sorts of gum dragon or dragon's blood	1. From a kind of cane in the East-Indies. 2. From Java and Surinam. 3. From the Canary and Madeira islands.
Dolichos soja	A kind of kidney bean, called daidfu	Used for making soye,* or Indian ketchup. See Kæmpff. Amœnitat.
Laurus cassia	Cassia lignea tree	Grows in Sumatra.
Laurus cinamomum	Cinnamon tree	In Ceylon, Guadaloupe, and in most of our newly ceded islands.
Laur. camphora	Camphire tree†	In Japan, and in Sumatra, now in England in the green houses

* The method of preparing East-India soye, or India ketchup.

Take a certain measure, for instance a gallon, of that sort of kidney beans, called daidfu by the Japanese, and caravances by the Europeans; let them be boiled till they are soft; also a gallon of bruised wheat or barley, but wheat makes the blackest soye, and a gallon of common salt. Let the boiled caravances be mixed with the bruised wheat, and be kept covered close a day and a night in a warm place, that it may ferment; then put the mixture of the caravances and wheat, together with the gallon of salt, into an earthen vessel, with two gallons and a half of common water, and cover it up very close. The next day stir it about well with a battering machine or mill (*ratabulum*) for several days, twice or thrice a day, in order to blend it more thoroughly together. This work must be continued two or three months, then strain off and press out the liquor, and keep it up for use in wooden vessels; the older it is the clearer it will be, and of so much more value. After it is pressed out, you may pour on the remaining mass more water, then stir it about violently, and in some days after you may press out more soye.

† The camphire from Sumatra is greatly preferable to that of Japan; we are not certain whether it is from a different species of tree, but it seems well worth

Latin Names.	English Names.	Observations.
		about London. It will grow freely where oranges and lemons do.
<i>Cycas circinalis</i>	Saga palm tree	In Java, and the warmest parts of the East-Indies.
<i>Amyris Gileadensis</i>	True balm of Gilead tree*	Lately discovered in Arabia by Dr. Forskall, and described by Dr. Linnæus in a late dissertation.
<i>Arundo bambo</i>	The true bamboo cane	Of great use in China, and might be also in the American States.†
<i>Anacardus Orientalis</i>	Siam varnish tree, called tonrack by the Japanese	The fruit of this is the Malacca bean, or marking nut, and the Oriental anacardium of the shops. This is the common varnish of the East-Indies, as described by Kæmpffer.
<i>Thea</i>	Tea	From Japan and China. See Kæmpff. Amœnitates, p. 60.‡

inquiring into, as the effects of proportionable quantities in medicine are surprisingly different, perhaps it may be owing to the great difference of heat in the climates.

* We have in the island of Jamaica, a species of tree of this genus, called by Linnæus *amyris balsamifera*. See *Species Plantarum*, p. 496. Sir Hans Sloane, in his *History of Jamaica*, vol. II. p. 24, calls this tree *lignum rhodium*, from the odoriferous smell of its wood when burnt, which it diffuses a great way; for which reason he believes it to be the tree that afforded the agreeable scent which Columbus perceived on the south shore of Cuba, upon the discovery of that island, as is mentioned by several historians. Dr. Pat. Browne in his *History of Jamaica*, p. 208. calls this tree white candlewood, or rosewood, and commends it much; he says it is very resinous, burns freely, and affords a most agreeable smell; and that all the parts of this tree are full of warm and acromatic particles.—Quere. Whether it is not worth while to extract the balsam, as it agrees so near in character and genus with that most valuable drug the balsam of Mecca?

† The French had brought this most useful plant from the East-Indies to their West-India islands; a few roots have been got from thence to Grenada, and will perhaps in time become familiar in our islands. But too much pains cannot be taken in the propagation of this plant, as its uses are manifold and extensive, both in building, and all kinds of domestic instruments.

‡ It is asserted by some people, that the green tea and the bohea tea are two different species, but without foundation; they are one and the same species. It is the nature of the soil, the culture and manner of gathering and drying the leaves, that makes the difference; for take a green tea tree and plant it in the bohea country, and it will produce bohea tea, and so the contrary. This is a fact attested by gentlemen now in London, that have resided many years in China, and who have had great experience in this article.—This plant has been lately obtained, and grows well in Georgia, &c. as it is become a valuable article of commerce, it should be encouraged to the utmost.

Latin Names.	English Names.	Observations.
<i>Gardenia Florida</i>	Umky of the Chinese	Used in dying scarlet in China. The pulp that surrounds the seeds, gives in warm water a most excellent yellow colour, inclining to orange. See Philosophical Transactions, vol. lii. p. 654, where there is an exact figure of it.
<i>Magnifera Indica</i>	East-India mango tree	This excellent fruit is much esteemed in the East-Indies, and it is said there is a tree of it now growing in the island of Madeira. By the description which Dr. Solander gives of this fruit, at Rio Janeiro, in Brazil, it is not so good as the East-India sort.
<i>Morus papyrifera</i>	Paper mulberry tree	Used for making paper in China and Japan. See Kæmpff. Amœnit. p. 467. This has been some time in the English gardens.
<i>Cinchona officinalis</i>	Jesuits bark tree	This grows at Loxa, in the province of Peru; and could it be obtained so as to be cultivated in the American States, would be of infinite advantage.
<i>Dorstenia contrayerva</i>	Contrayerva root	This grows in New Spain, Mexico, and Peru.
<i>Smilax sarsaparilla</i>	Sarsaparilla root	It is brought from the bay of Campeachy, and the gulph of Honduras, where it grows in plenty, and might easily be propagated in the southern States.
<i>Copaifera officinalis</i>	Balsam copaiva tree	In Brazil and Martinico.
<i>Toluifera balsamum</i>	Balsam tolu tree	This tree grows near Carthagena, in South-America.
<i>Hymenaea courbaril</i>	The locust, or gum copal tree, for the finest transparent varnish	This tree is known to yield the true gum copal, and that the difference between this and gum anime, may be owing to soil and heat of climate; it grows wild in the American islands, the Mulquito shore, and in Terra Firma,

Latin Names.	English names.	Observations.
<i>Jalapium officinarum</i>	True jalap	This plant is supposed by some to be a kind of bindweed or convolvulus, that grows near Mexico; by others it is tho't to be a species of Marvel of Peru. As we are uncertain of the genus, it is well worth inquiring into, as a most useful drug, in order to propagate it in the States, particularly the southern.
<i>Bixa orellana</i>	Arnotto, for dying	This grows in all the warm climates of America. The French cultivate it, but what the Spaniards send is much richer in colour, and more valuable.
<i>Mimosa Senegal</i>	Gum Senegal tree	This grows in Egypt, and in Senegal.
<i>Mimosa Nilotica</i>	Gum arabic	In Egypt, from whence the seeds may be procured.
<i>Ficus sycomorus</i>	True sycamore of Zacheus	This is reckoned the most durable timber known. The repositories of the mummies found in Egypt, are made of this timber.
<i>Ficus Carica</i>	Turkey figs	Figs grow in the greatest perfection in Carolina, and would become a valuable trade if they had the method of curing them as in Turkey.
<i>Vitis apyrena</i>	Currants, or Corinthian grapes	The cuttings of this vine might be procured from Zant.
<i>Fraxinis ornus</i>	Calabrian manna ash*	This is worth trying in the southern colonies, where the heats are violent in the summer. It is common in English nursery gardens.
<i>Amygdalus communis</i>	Sweet almonds	These would grow to great perfection in the southern States.
<i>Capparis spinosa</i>	Caper tree	This shrub requires a rocky soil to grow in, as it is found about Marseilles and Toulon.

* There is no drug so liable to adulteration as this; and therefore it is a medicine so frequently in use among persons of tender constitutions, especially young children, great care should be taken to have it genuine,

Latin Names.	English Names.	Observations.
<i>Punica granatum*</i>	Balaustians or the blossoms of the double flowering pomegranate	This tree would thrive extremely well in the southern States, and yield a profitable article in their blossoms. Plants of this kind are to be bought from most English nurserymen.
<i>Lichen roccella</i>	Argal, canary-weed, or orchell	It is possible this valuable plant may be found in the American islands, as well as in the Canaries and Cape Verd islands.
<i>Cistus ladanifera</i>	Gum labdanum	In Spain and the Archipelago.
<i>Bubon galbanum</i>	Gum galbanum	In Ethiopia.
<i>Pastinaca opoponax</i>	Gum opoponax	In Sicily.
<i>Amomum cardamomum</i>	Cardamums	In the East Indies.
<i>Curcuma longa</i>	Tumerick	In the East-Indies.
<i>Astragalus tragacantha</i>	Gum tragacanth, or gum dragon	In the south of France and in Sicily.
<i>Cucumis colycinthis</i>	Coloquintida, or bitter apple	In Africa.
<i>Gentiana lutea</i>	Gentia	In the Alps, Appennines, and Pyrenees. To be had of the nurserymen in England.
<i>Similax China</i>	China root	In China and in New-Spain.
<i>Pimpinella anisum</i>	Anise seeds	In Egypt.
<i>Gambogia gutta</i>	Gamboge	In the East-Indies.
<i>Quercus coccifera</i>	Alkermes oak	About Marseilles and Toulon.
<i>Myrrha offic.</i>	Gum myrrh	In Abyssinia.
<i>Benzionum offic.</i>	Gum Benjamin	In Sumatra and Java.
<i>Ammuniacum offic.</i>	Gum ammoniacum	In Africa.
<i>Balsamum Peruvianum</i>	Natural balsam of Peru	In Peru.
<i>Olibanum Thusi</i>	Frankincense	In the Upper Egypt and interior parts of Africa.

* The single flowering, or fruit-bearing pomegranate, will afford the most grateful addition to the fruits of the States, and a valuable medicine. The ripe fruit full of seeds is to be met with at the English fruit shops in the winter season: from the seeds of such fruit this tree may be easily propagated.

Latin Names.	English Names.	Observations.
<i>Nux moschata offic.</i>	Nutmegs with mace	In Amboyna.
<i>Caryophyllus aromaticus</i>	Cloves	In the Molucca islands.
<i>Piper nigrum</i>	Pepper	Sumatra.
<i>Garcinia mangostana</i>	Mangosteens	A most delicious fruit, grows in Java, and in several parts of the East-Indies.
<i>Lechee</i>	Lechee of China	This fruit is highly commended by all persons who have been in China.
<i>Ipecacuanha</i>	Ipecacuanha of the shops, or Brazilian root	A very useful medicine, and worthy of attention to propagate; it will grow in any warm climate.
<i>Ferula assa fœtida</i>	Assa fœtida, or devil's dung, called hing in the Malay language	The gum of this plant is much used in medicine. Kæmpff. 535 and 536.

To this catalogue may be added liquorice, saffron, and aloes socotrina, as well as many others of equal importance.

We shall here subjoin some directions for carrying over seeds and plants from distant countries in a state of vegetation. Many valuable trees and plants grow in distant countries, as in Europe, and particularly in the northern provinces of China, about the latitude of forty degrees, which would thrive well in North-America, more especially in the middle and southern States, which lie about the same latitude. But as the distance is great, the manner of preserving the seeds properly, so as to keep them in a state of vegetation, is an affair of considerable consequence and some difficulty; the following hints are therefore offered for that purpose.

In the first place it ought to be carefully attended to, that the seeds should be perfectly ripe when they are gathered; and they should be gathered, if possible, in dry weather; afterwards they should be spread thin on paper or matts, in a dry airy room, but not in sunshine. The time necessary for this operation will vary according to the heat of the climate, or season of the year, from a fortnight to a month, or perhaps two may be necessary; the hotter the season, the less time will suffice. This is to carry off their superfluous moisture, which, if

confined, would immediately turn to mouldiness, and end in rottenness.

As there are two methods that have succeeded, and put the Americans in possession of several young plants of the true tea-tree of China, we shall mention them both, in order to assist the collector in conveying the seeds of many valuable plants.

The first is by covering them with bees-wax in the manner explained in Phil. Transact. vol. LVIII. p. 75.

It principally consists in chusing only such seeds as are perfectly sound and ripe. To prove this, some of them must be cut open to judge what situation the rest may be in, taking care to lay aside any that are outwardly defective, or marked with the wounds of insects. When a proper choice of them is made, they should be wiped extremely clean, to prevent any dirt or moisture being inclosed; each seed then should be rolled up carefully in a coat of soft bees-wax half an inch thick; the deep yellow English bees-wax is the best. When the number intended to be inclosed are covered, pour some bees-wax melted into a chip-box of seven inches long, four broad, and three deep, till it is above half full; and just before it begins to harden, while it is yet fluid, put in the seeds rolled up in rows till the box is near full; then pour over them some more wax while it is just fluid, taking care when it is cold to stop all the cracks or chinks that may have proceeded from the shrinking of the wax, with some very soft wax; then put on the cover of the box, and keep it in as cool and airy a place as possible.

The method of inclosing tea seeds singly in wax, and bringing them over in that state, has been practised for some time; but few have succeeded, owing to the thinness of the coat of wax, or putting paper first round them, or inclosing them too moist.

To this we add a method that promises success for carrying plants from different parts. As there is a good deal of difference in climates, it will be necessary to observe, that plants from warm climates should be put on board so as to arrive in warm weather, otherwise they will be destroyed by the cold; and the ever-greens, which are the most curious, must be sent in the winter months, while their juices are inactive, so as to arrive before the heats come on. If the plants sent were planted in pots or boxes, and kept a year, they might be carried over with very little hazard; or even if they were first transplanted from the woods into a garden, till they had formed roots, they might be sent with much more safety.

The size of the boxes that will be most convenient for stowing them on board merchant ships, where there is very little room to spare, should be three feet long, fifteen inches broad, and from eighteen inches to two feet deep, according to the size of the young trees; but the smallest will be most likely to succeed, provided they are well rooted. There must be a narrow ledge nailed all round the inside of the box, within six inches of the bottom, to fasten laths or packthread to form a kind of lattice-work, by which the plants may be the better secured in their places. If the plants are packed up just before the ship sails, it will be so much the better.

When they are dug up, care must be taken to preserve as much earth as can be about their roots; and if it should fall off, it must be supplied with more earth, so as to form a ball about the roots of each plant, which must be surrounded with wet moss, and carefully tied about with packthread, to keep the earth about the roots moist: perhaps it may be necessary to inclose the moss with some paper or broad leaves, that the packthread may bind the moss the closer. Loamy earth will continue moist the longest. There must be three inches deep of wet moss put into the bottom of the box, and the young trees placed in rows upright close to each other, stuffing wet moss in the vacancies between them and on the surface; over this, leaves should be put to keep in the moisture, and over them the laths are to be fastened cross and cross to the ledges or packthreads to be laced to and fro; to keep the whole steady and tight. The lid of the box should be either nailed down close, or may have hinges and a padlock to secure it from being opened, as may be found necessary, with proper directions marked on it to keep the lid uppermost. There must be two handles fixed, one at each end, by which means there will be less danger of disturbing the plants. Near the upper part of the ends of the box there must be several holes bored to give air; or, in making the box, there may be a narrow vacancy left between the boards of one-third of an inch wide, near the top, to let out the foul air: and perhaps it may be necessary to nail along the upper edge of these openings, list, or slips of sail-cloth, to hang over them, to secure the plants from any spray of the sea; and at the same time it will not prevent the air from passing through. Boxes with plants packed in this manner must be placed where the air is free, that is, out of the way of the foul air of the ship's hold.

The following method of preserving seeds from turning rancid from their long confinement, and the heat of the climates

which they may pass through, was communicated some years ago by the celebrated professor Linnæus, of Upsal, in Sweden. He advises, that each sort of seed should be put up in separate papers, with fine sand among them, to absorb any moisture; dried, loamy or soapy earth may be tried. These papers, he says, should be packed close in cylindrical glass, or earthen vessels, and the mouths covered over with a bladder, or leather tied fast round the rims. He then directs that these vessels, with the seeds in them, should be put into other vessels, which should be so large, that the inner vessel may be covered on all sides, for the space of two inches, with the following mixture of salts. Half common culinary salt; the other half to consist of two parts of saltpetre, and one part of sal-ammoniac, both reduced to a powder, and all thoroughly mixed together, to be placed about the inner vessel, rather moist than dry. This he calls a refrigeratory, and says, it will keep the seeds cool, and hinder putrefaction. Perhaps if small tight boxes, or casks or bottles of seeds were inclosed in casks full of salts, it might be of the same use, provided the salts do not get at the seeds: and as sal-ammoniac may not be easily met with, half common salt, and the other half saltpetre, or common salt alone, might answer the same end. But it would be very necessary to try both methods, to know whether the latter would answer the purpose of the former, as it would be attended with much less trouble, and might prove a useful method to seedmen, in sending seeds to warm climates.

The smallest seeds being very liable to lose their vegetative power by long voyages through warm climates, it may be worth while to try the following experiment upon such kinds as are known for certain to be sound. Dip some square pieces of cotton cloth in melted wax, and while it is soft and almost cold, strew the surface of each piece over with each sort of small seed, then roll them up tight, and inclose each roll in some soft bees-wax, wrapping up each of them in a piece of paper, with the name of the seed on it; these may be either surrounded as before with salts, or packed without the salts in a box, as is most convenient.

The seeds of many of the small succulent fruits may be carried from very distant parts, by pressing them together, squeezing out their watery juices, and drying them in small cakes gradually, that they may become hard; they may be then wrapt up in white writing paper, not spongy, as this is apt to attract and retain moisture; but we believe it will be found, that a covering of wax will be better than one of paper.

The Alpine strawberry was first sent to England in a letter from Turin to Henry Baker, Esq. F. R. S. by pressing the pulp with the seeds thin upon paper, and letting it dry before they were inclosed. The paper mulberry from China was brought to England about the year 1754, much in the same manner.

These hints may prompt to try the larger succulent fruits; for instance, the mangoes, lechees, and others of this kind. If their fleshy part, when they are very ripe, was brought to the consistence of raisins or dried figs, it would keep their kernels plump, and in this state they might be better preserved in wax than by any other method yet known. The same method may be tried for flower seeds and other ornamental plants for gardens, which have been but little attended to in the United States, and which therefore an European should furnish himself with if he means to reside in the country part of the Union; the same attention may be necessary to stones and kernels of choice European fruits.

METHOD OF CLEARING AND CULTIVATING NEW LANDS.

Several methods of raising a crop on new land have been practised in the New-England States; the easiest and cheapest was originally learned of the Indians, who never looked very far forward in their improvements: the method is that of girdling the trees, which is done by making a circular incision through the bark, and leaving them to die standing: this operation is performed in the summer, and the ground is sown in August, in general with winter rye, intermixed with grass. The next year the trees do not put forth leaves, and the land having yielded a crop, becomes fit for pasture. This method helps poor settlers a little the first year; but the inconvenience of it is, that if the trees are left standing, they are continually breaking and falling with the wind, which endangers the lives of cattle; and the ground being constantly encumbered by the falling trees, is less fit for mowing; so that if the labour be not effectually done at once, it must be done in a succession of time.

Some have supposed, that the earth, being not at once, but by degrees exposed to the sun, preserves its moisture, and does not become so hard; but the experience of the best husbandmen has exploded this opinion. The more able sort of husbandmen in the New-England States, therefore, chuse the method of clearing the land at first, by cutting down all the trees without exception. The most eligible time for this operation

is the month of June, when the sap is flowing and the leaves are formed on the trees : these leaves will not drop from the fallen trees, but remain till the next year, when, being dry, they help to spread the fire, which is then set to the trees. This is done in the first dry weather of the succeeding spring, and generally in May ; but if the ground be too dry, the fire will burn deep and greatly injure the soil. There is therefore need of judgment to determine when the wood is dry enough to burn, and the soil wet enough to resist the action of the fire : much depends on getting what is called a *good burn*, to prepare the ground for planting. To insure this, the fallen trees are cut and piled, and the larger the pile the better chance there is for its being well burned. But if the land be intended for pasture only, the trees are cut down, and after the fire has destroyed the limbs, grass is sown, and the trunks of the trees are left to rot, which, in time, turn to good manure, and the pasture is durable.

Some husbandmen prefer felling trees in the winter, or very early in the spring, before the snow is gone. The advantage of this method is, that there are fewer shoots from the stumps of the felled trees, than if they are cut in the summer ; these shoots encumber the ground, and must be cut out of the way or destroyed by fire. The disadvantage of cutting trees in the winter is, that they will not dry so soon, nor burn so well, as those cut in the summer with the leaves on : besides, the month of June is a time when not only the trees are easiest to be cut, but the seed is in the ground, and people can better attend to this labour, than when they are preparing for their spring work, or have not finished their winter employments : the days too are then at their greatest length, and more labour can be done in the course of a day : this labour, however, is often paid for by the acre rather than by the day ; and the price of felling an acre is from one to two dollars, according to the number and size of the trees.*

The burning of trees generally destroys the limbs and smaller trunks ; the larger logs are left scorched on the ground, and sometimes serve to fence the field. After the fire has had its effect, and is succeeded by rain, then is the time for planting. No plough is used, nor is it possible for one to pass among the roots and stumps, but holes are made with a hoe in the loose soil and ashes, in which, the seed being dropped and covered,

* Belknap's History of New-Hampshire.

is left to the prolific hand of nature, no other culture being necessary or practicable, but the cutting of the fireweed, which spontaneously grows on all burnt land. This fireweed is an annual plant, with a succulent stalk and long jagged leaf; it grows to the height of five or six feet, according to the strength of the ashes: it bears a white flower, and has a winged seed, which is carried every where by the wind, but never vegetates, except on the ashes of burnt wood; it exhausts the ground, and injures the first crop, if it be not subdued, but after the second year disappears. About the second or third year another weed, called pigeonberry, succeeds the fireweed, and remains till the grass overcomes it: it rises to the height of three feet, spreads much at the top, and bears bunches of black berries, on which pigeons feed.

When the trees are burnt later in the summer, wheat or rye is sown, mixed with the seeds of grass, on the new land; the seed is scattered on the surface, and raked in with a wooden or iron tooth-rake, or a hoe. The husbandman knows on what kind of land to expect a crop from this mode of culture, and is seldom disappointed. Sometimes a crop of Indian corn is raised the first year, and another of rye or wheat the second year, and the land is sown with grass, which will turn it into pasture, or be fit for mowing, the third year. The first crop, in some land, and the two first crops in any good land, will repay the expense of all the labour. It is not an uncommon thing for people, who are used to this kind of husbandry, to bring a tract of wilderness into grass for the two first crops, the owner being at no expense but that of felling the trees and purchasing the grass seed. Many husbandmen in the old towns buy lots of new land, and get them cleared and brought into grass in this way, and pasture great numbers of cattle; the feed is excellent, and the cattle are soon fatted for the market.

Husbandmen differ in their opinions concerning the advantages of tilling their new land the second year: some suppose, that mixing and stirring the earth does it more good than the crop injures it: others say, that one crop is sufficient before the land is laid down to grass; and that if it be sown with grain and grass, as soon as it is cleared, the large crops of grass which follow, will more than compensate for one crop of grain. When the seeding with grass is neglected, the ground becomes mossy and hard, and must be ploughed before it will receive seed. Land thus sown will not produce grass so plentifully as that which is seeded immediately after the fire has run over it:

besides, this neglected land is generally overspread with cherry trees, raspberry bushes, and other wild growth, to subdue which much additional labour is required. In good land, the first crops of hay are, on an average, a ton to an acre. That land which is intended for mowing, and which takes the common grass well at first, is seldom or never ploughed afterwards; but where clover is sown, it must be ploughed and seeded every fourth or fifth year: good land, thus managed, will average two tons of clover to the acre.

Such is the process of clearing and cultivating lands in the New-England States, for a further view of the productions of which the reader is referred to the history of those States.* A few additional remarks, however, may be necessary on the subject of tree fruit. These States are certainly too far north to have it in perfection, *i. e.* of the first quality, without particular attention. New-York, New-Jersey and Pennsylvania, have it in perfection. Depart from that tract, either southward or northward, and it degenerates. We believe, however, that good fruit might be produced even in New-Hampshire, with suitable attention: a proof of this is, that sometimes they have it. In theorizing on the subject, three things appear to us particularly necessary, all which are totally neglected by the generality of American husbandmen. The *first*, after procuring thrifty young trees of the best kinds, and grafting such as require it, is to chuse a situation for them, where they may have the advantage of a warm rich soil, and be well sheltered from the chilling blasts of the ocean. The *second* is to keep the trees free from superfluous branches, by a frequent use of the pruning hook, and the earth always loose about their roots. The *third* is to defend the trees from insects, particularly those which by feeding on the fruit render it small and knotty, as we frequently find apples and pears; or by depositing their eggs in the embryo, occasion its falling off before it comes to maturity, as is observable in the various kinds of plums. But most of the farmers go on in the path traced out by their ancestors, and are generally averse to making experiments, the result of which is uncertain, or to adopting new modes of husbandry, the advantages of which are in the smallest degree problematical. There are few cultivators among them who theorize, and still fewer who read and think.

In the middle States, when a settler fixes on a spot of land, which he usually buys, paying for it in gales, his first care is to cut down a few trees to build his log-house. A man can cut down and lop from twenty to thirty in a day of the size proper for the purpose. These form the walls of the building. In general, the log cabins of this kind are such as half a dozen men will easily finish in three or four days. Ten guineas worth of labour thus employed, will lodge a family quite as comfortable as in the better kind of cottages in England.

He then proceeds to grub the land, *i. e.* to take up the small trees, shoots, and underwood, by the roots: these are burnt upon the ground. In a general way this may be contracted for at about twenty shillings an acre. It is generally reckoned to cost usually five days work of a man to whom, as it is very hard work, the pay is three shillings a day, finding him in victuals, and allowing him a dram of whiskey morning and evening. The price of this kind of work will easily be conceived to vary according to circumstances. Where land is heavily timbered with trees of two or three feet diameter, as it is about the heads of the creeks, and on the islands of the Susquehannah, the underwood is in small proportion, but the expense of clearing much greater.

The land being grubbed, the trees immediately about the house are cut down, and for the present another portion is girdled only. This process, destroying the vegetation of the branches, lets in the light and air sufficiently to ensure a crop the next season. The trees cut down are split into a kind of rail for fences, which are made by laying these pieces angular-wise one on the top of another, to the height of six or seven in number, much in the same way as the logs of a house are laid on each other, but flanting in alternate directions. A post and rail fence is not thought of till some years afterwards. In new land, after grubbing and girdling, *i. e.* taking up the underwood, and cutting through the bark of the larger trees in a circle all round the trunk, which prevents the leaves from growing next season; he plows about two inches and a half deep, then across; then sows the seed and harrows it. Upon the average of his land, his crop of wheat is not above twelve bushels per acre; of oats from fifteen to twenty.*

* In England we apprehend, the average wheat crop per statute acre is at least twenty bushels. The average of the Isle of Wight in 1793, was at least thirty-five bushels. The average of the whole State of Pennsylvania cannot be reckoned at above ten or twelve. Maryland the same. This is owing to the neglect of manures, to the repeated working of the same ground with crops of grain till

The trees cut down are never rooted up. The value of the land gained will not pay the expense of doing this. They are cut off about eighteen inches or two feet from the ground. The side roots are obstructions to the plough for about two years, when they are completely rotted. The stumps in New-York and Pennsylvania States do not rot away completely under ten years; in Virginia and Maryland this happens in about seven. It appears, that by cutting off the tree a few inches below the surface of the ground, and covering the stump with mould, the expense would not be much increased, the deformity, which is indeed a great one in an American landscape, would be prevented, and the process of putrefaction accelerated. We never heard of but one person, Lord Stirling in New-Jersey, who had his trees rooted up; and we are inclined to think it was done at an expense much beyond the convenience gained.

The expense of clearing heavily timbered land is considerable, sometimes to the amount of five and six pounds per acre, but the great fertility of this kind of land affords ample recompence. In general the whole expense is not forty shillings an acre. One-half or two-thirds of the expense of clearing land in New-York State is repaid by the pot-ash obtained in burning the wood. In Pennsylvania, and the southern States, the back settlers are not so much in the practice of this useful method. The land surveyors have four pounds per thousand acres for surveying a tract of land, and making return of it; but as the owner finds labourers and provisions, these, with other incidental expenses, will make the cost of surveying altogether about twenty shillings per hundred acres.

Planters of any consequence frequently have a small distillery as a part of their establishment. A Mr. White on the banks of the Susquehannah near Sunbury, has one which may serve as a specimen of this kind: he has two stills, the one holding sixty, the other one hundred and fifteen gallons. To a bushel and a half of rye coarsely ground, he adds a gallon of malt and a handful of hops; he then pours on fifteen gallons of hot water, and lets it remain four hours, then adds sixteen gallons and a half more of hot water, making together a barrel of thirty-one

it will bear no more, and to the very slight labour they bestow upon their tillage. It must be considered also, that much of the land is occupied by the stumps of trees not rotted, and never grubbed up.

But though in America less grain is produced per acre than in England, they get more per man. There, land is plentiful and labour scarce. In England it is the reverse. Hence the accuracy of British, and carelessness of American cultivation.

gallons and a half; this is fermented with about two quarts of yeast. In summer the fermentation lasts four days, in winter six; of this wash he puts to the amount of a hogshead in the larger still, and draws off about fifteen gallons of weak spirit, which is afterward rectified in the smaller still, seldom more than once. One bushel of rye will produce about eleven quarts of saleable whiskey, which fetches per gallon four shillings and sixpence by the barrel. *Whiskey* in England is usually a spirit drawn from oats. The rye produces the basis of gin.

We have no doubt but barley could be well grown, and well malted and brewed, in almost any part of America; and beer might be more generally introduced. The American small beer, as well as the porter, is at present very good; and as there is no excise upon malt, nor upon malt-liquor; as grain is cheap, and the materials of a brewery to be had for little or nothing, it is rather surprising that breweries are not more generally established.

The best view of the husbandry of the middle States, and the clearest ideas on the subject, may be obtained from observations on a farm of a medium extent—such a one occurs at Paxtang, in the State of Pennsylvania, in the possession of a Mr. M'Allister, a spirited and intelligent farmer; and as his place will afford a favourable specimen of an American plantation, we shall detail his establishment.

His *farm* is about three hundred acres, near the river; a sandy soil, earlier in vegetation by ten days or a fortnight than the higher lands at a distance. About one third of this quantity is in cultivation, the rest in wood.

The rotation of his *crops* are grain; then clover mown twice the first year, and once the second year. In autumn, it is turned in, and grain again, of some kind, sown upon the same land.

He *manures* for his crops either with dung, with ashes, or with plaister of Paris. It does not appear that he has any system of proportion between cattle and land, for the purpose of procuring a regular supply of manure. The plaister of Paris he procures in the stone from Philadelphia, formerly at seven, now at twelve dollars per ton: he grinds it at home; one ton yields twenty-four bushels. The French plaister of Paris is much the best; the Nova-Scotia plaister is not so good. It will not answer at all as a manure upon wet lands, but answers well on hot sandy soils, which it preserves moister than they would otherwise be during the heats of summer. He sows the plaister in powder with clover, five or six bushels to the acre.

His average produce is of wheat and rye about twenty-three bushels to the acre, corn, (maize) and oats about thirty bushels. Weight of a bushel of wheat from sixty pounds, which is the market weight, to sixty-five pounds; of rye about fifty-eight pounds; oats about thirty-five pounds; corn, the white flint kind sown the first week of May, about sixty pounds per bushel. The gourd-feed, maize, yields larger crops, but it is a late grain.

By means of his plaister manure he obtains at two mowings, per annum, three ton and a half of hay per acre. The hay is ready to be stacked usually the day after it is cut.

His prices of produce and labour are to husbandmen twenty-five pounds a year, with board, washing, and lodging; or six dollars a month, or two shillings and six-pence a day in common, and three shillings in harvest time. For mowing an acre he pays three shillings, finding victuals and a pint of whisky, or four and six-pence without finding any thing else. Women in reaping have as much wages as men, but at hay-making only fifteen-pence a day, and their victuals. The price of wheat is six shillings and six-pence a bushel; maize three shillings and nine-pence; rye four to five shillings; oats two to two shillings and six-pence; buck-wheat two shillings and six-pence; salted pork thirty-three shillings per cwt.

His ploughs are the common light ploughs of the country. Drill ploughs are little in use: in most parts, the stumps of trees would prevent their being used. He has rejected the hoe-plough: first, because he finds it cuts off too many of the young fibres of the plants; and secondly, because the land is too dry to require the furrow. In lieu of the hoe, he harrows the ground, without regarding the grain, so as to lay it quite flat and destroy the ridge and furrow. This, he says, has been the practice in the neighbourhood for two years past, with success.

In feeding his cattle, he makes it a rule to give them as much as they will eat. The cows, besides clover-hay, and Timothy-hay, have potatoes mixed with ground Indian corn, and the wash of the distillery. The hogs the same. His cows, however, even in spring do not yield above five or six quarts of milk at a meal. Here, as almost every where in America, Indian corn is the food the of the poultry.

Intstead of the chaff-cutting machine, which he now uses, he proposes to bruise the hay between two mill-stones, of which the edges come contact: he has tried this in a small way, and finds the hay much better and more expeditiously cut than by the chaff cutter.

His *fences* are partly the common stake fence of the country, which we have before described, of wood split into lengths of six or seven feet, and three or four inches scantling, and laid upon each other angular-wise: partly a *chevaux de frize* fence of wood stuck in the ground, and partly the common post and rail fence. He has tried thorn and privet hedges without success. He then turned his attention to the prickly locust as an indigenous plant of the country. The seeds of this tree are contained in a pod like a bean, and it is extremely common in Pennsylvania. He ran a furrow with a plough about two or three inches deep, round his orchard, drilling in the seeds and covering them; but from the want of a ridge being previously thrown up, some heavy rains, which succeeded in about ten days, washed away a great many of the seeds, and rendered the fence incomplete. Those standing are about four years old, from the seed. They are as thick as a man's arm, at about a foot from the ground, and eight or nine feet high; and had they been dubbed, would have been a very complete fence, but the rains having spoiled the first plan, he neglected them. The one-year shoots of the locust-tree laid along the furrow, would have thrown out sprouts. Perhaps this would be the easiest method of planting them for a hedge. M'Allister says, that were he to go upon a new farm, of a thousand acres for instance, of uncleared land, his first object should be to cut a road of about two rood in width all round the estate. The heavy wood he would cut up for fences or fire wood, or such other purposes as it might be fit for: the brush wood he would lay in two piles on each side this new road: between these he would sow or plant locust, and by the time the brush wood was rotten, the locust would be a fence. The next operation should be to plant an orchard, and erect a saw mill. These ideas appear to be judicious.

His garden produces very fine grapes and strawberries. The dry sandy land there seems well adapted to the culture of the vine. A German in his neighbourhood, who possesses a very small farm, has made every year lately three or four barrels of wine, which M'Allister, who has tasted it, thinks very good. He has no doubt whatever of the practicability of making good wine in Pennsylvania. This agrees with other information of persons, who having succeeded in the small way, are planting regular vineyards. Indeed there is a society formed at Philadelphia for the promotion of the culture of vineyards, and there does not appear the slightest obstacle to the success of the attempt. Certainly the Rhine grape, which promises fair at Sir

Richard Worsley's vineyard in the Isle of Wight, is much more likely to succeed in the middle and southern States of America.

M^r Allister's orchard contains thirty acres of ground, and one thousand six hundred apple trees, part of them planted eight, and part thirteen years ago. They are two rood, thirty-three feet, apart. The year, 1793, was a very bad year for apples, and he made only fifteen barrels of cyder; the year before he made six hundred barrels, and if 1794 proved a good year, he expected to make one thousand from his orchard. He supposes his trees in this case likely to yield ten bushels of apples on the average. Perhaps this is the least troublesome and most profitable application of the ground. When the general appearance of the orchard has a red tinge, the trees are healthy. Against the grub he uses a decoction of tobacco. He has several peach trees, but they have not long been planted. But one plum tree of the damascene kind, and a few pear, or apicot, and no nectarine trees. He gives sixpence a piece for apple and peach trees, about three or four years old, that is fit to plant out. Peach trees grow about the thickness of the thumb, and four or five feet high in one year, from the stone, and bear fruit in four years from the stone. Cyder usually sells at ten shillings and twelve shillings per barrel, of thirty-one gallons and a half, but 1793 being a bad year, it sold for three dollars per barrel, *i. e.* thirteen shillings and six-pence sterling, one pound two shillings and six-pence currency. His cyder-press consists of two cast-iron cog wheels, about one foot diameter, with slanting cogs, turning vertically; these he means to change for wooden wheels, owing to the action of the acid upon the iron: they are fed with apples by a hopper; the motion is given by a horse moving round. The mash of apples thus produced, is put into a kind of case, and pressed, not by a screw, but by one end of a massy beam, which is forced down by means of the other end being raised by a lever. A man depresses the lever, which raises the nearest, and depresses the farthest end of the beam. The juice is thus forced upon a platform about seven feet square, with a groove all round, and an outlet for the juice from one of the grooves; the beam is about twenty-five feet long, and about fifteen inches square; the frames in which it moves, about twenty feet high: he sometimes finds a difficulty in clearing his cyder, which he has not yet conquered. In England this is not an easy part of the process nor is the best mode of doing it settled among the cyder makers. In the warmer climate of America, the liquor will be still more liable to spontaneous fermentation after being once fined. The

cyder, however, of Pennsylvania, is much superior, in flavour at least, to the British.

He has a fish-pond of two or three acres, in which he keeps all the kinds of fish which the river produces. The waste water from the fish pond is applied to several purposes, particularly to irrigate a quantity of meadow ground at half a mile distance. The Americans seem more alive to the benefit of irrigation than any other kind of agricultural improvement.

He has a distillery, much on the same plan as that already noticed; it is managed by a professed distiller, who receives one third of the spirit produced for his trouble.

He has a smokery for bacon, hams, &c. it is a room about twelve feet square, built of dry wood, a fire place in the middle, the roof conical, with nails in the rafters to hang meat intended to be smoked. In this case a fire is made on the floor in the middle of the building in the morning, which it is not necessary to renew during the day: this is done four or five days successively. The vent for the smoke is through the crevices of the boards. The meat is never taken out till it is used. If the walls are of stone, or green wood, the meat is apt to mould.

His saw mill, which cost about one hundred pounds, consists of an undershot water wheel, with a crank, which in its revolution moves one saw in a frame up and down. Another movement is annexed, by which a ratchet wheel is pushed on, and this moves the logs forward in a frame; to the frame are annexed pins, which, when the saw has passed through the log, throws the works in and out of gear; one saw working one thousand feet a day, is as much as that neighbourhood can at present keep employed, and the machinery is less complicated than if it worked more saws, and is about sufficient to keep one man employed in attending it, supplying it with logs, and removing the planks as they are cut. This sawyer has for wages six-pence per one hundred feet; in eighteen hours the saw will cut two thousand two hundred feet. M'Allister receives from two shillings to two shillings and six-pence per one hundred feet. He purchases the logs from people who live up the country, and they send them down in rafts: he pays from two shillings and six-pence to three shillings a piece for logs of from fifteen to twenty feet long, and about a foot diameter; they come down in rafts consisting of from fifty to one hundred logs broad, and one eight or ten feet longer than the rest, fastened across the rest with withy

twigs; the projecting ends of the long cross log answer for the purpose of steering by.

His grist mill cost about eight hundred pounds; he lets it out to a tenant. A load of wheat is sixty bushels, which costs twenty-five shillings grinding, the farmer having the offal, *i. e.* the seconds, middlings, and bran. The waste in grinding is about twelve pounds per cwt. Sixty bushels of wheat make twelve barrels of flour, of one hundred and ninety-six pounds each, nett, *i. e.* somewhat more than three bushels to one cwt. The offal is worth about three pounds a load: barrels cost about one shilling and eight-pence each; if too green, they turn the flour sour. The offal pays the expense of grinding and barrels. Flour sells at Philadelphia for about forty-five shillings a barrel.* It is sent thither from Paxtang, M'Allister's, by way of Newport, at ten shillings a barrel.

The details given respecting Mr. M'Allister's establishment may appear long, but we were anxious to convey clear ideas of the actual state and mode of living of the American planters, of which this is a fair, though a favourable specimen. Comfortable as it is, M'Allister, like almost all the Americans, having improved the land he occupies, is not so attached to the spot as to be unwilling to remove to the wilderness of the back country, to see a new creation of the same kind form around him, the produce of his own exertions.

In the best cultivated parts of the middle States, the course of crops appear to be:

First,---Indian corn, sown from the middle of May to the first week in June, in hills about four feet apart each way, dropping three or four seeds in a hole. This is usually gathered off time enough to sow wheat in the fall of the year, though the Indian corn will stand without damage into the winter.

Second crop is wheat, for which the ground is prepared by two hoe plowings between the corn in the preceding summer, the plough going up one side of a ridge and down the other, and the same transversely, which earths up the corn (maize) in the form of a hillock. The wheat is reaped at the usual time, in the latter end of the summer. In the spring of this second year, however, clover is sown among the wheat, and when the latter crop is gotten off the ground, a few cattle are

* In the latter end of the year 1793, at Philadelphia, it had risen to forty-seven and forty-eight shillings.

turned into the clover for a short time, just to top it, but not to eat it close.

Third and fourth year, clover mown twice in each year. After the last mowing in the autumn of the fourth year, the ground is plowed and fallowed till May, when in the fifth year, Indian corn comes on again.

Sometimes rye or winter barley is substituted for wheat, and sometimes oats for Indian corn, in which case the oats are sown in April. Frequently the ground is made to yield an autumnal crop of buck wheat, making two corn crops in one year, in which case the buck wheat is sown in June, before the wheat harvest, and is cut just before the November frosts. The fall, autumnal, crops are usually sown as near the middle of September as possible. There, as in England, white clover is the produce of lime-stone soil.

In the southern States, and what is called the western territory, the method of preparing and cultivating new lands is similar to the middle States, except in the cultivation of tobacco, rice, indigo, &c.

CULTURE OF TOBACCO.

With respect to the culture of tobacco, it is an art that every planter thinks he is a proficient in, but which few rightly understand. A man who wishes to make fine tobacco, should be very particular in the choice of his seed; we mean as to the kind. We do not know a greater variety of any kind of vegetable than of tobacco; from the sweet-scented; the best sort, to the thick-jointed, a coarse kind of tobacco, but of which we think the most can be made. We would recommend to a gentleman who would wish for the reputation of a good planter, to cultivate the true sweet-scented.

When he has chosen his seed, let him prepare the beds in which he intends to sow it, very fine; when thus prepared, they must be burned with corn stalks, in order to destroy the seeds of weeds and grass, which, even when he has done the best with his beds, he will find very troublesome and difficult to extirpate. The best time for sowing the seed is as early after Christmas as the weather will permit. When sown in beds, prepared as above directed, which should be done as soon as possible after they are burned, instead of raking in the seed, the beds should either be patted with boards, or gently trodden with naked feet. This being done, the next care is the covering them warmly with cedar or pine brush, to defend the young plants from the frost.

After all his trouble and care, the planter's hopes are often blasted by a little fly, which frequently destroys the plants when they first come up, and very often when they are grown to a moderate size; no certain remedy against them has yet been discovered: we have, indeed, heard, that sulphur will destroy them, and we believe it will; but it must be often repeated, and will be too expensive. We think that a pretty strong infusion of sassafras root bark, sprinkled frequently over the beds, would destroy those insects; and we judge so, because its effects have been experienced upon the lice, a kind of fly that infests cabbages. Drought will also destroy the plants, even where they are large in the beds; the planter should, therefore, before the drought has continued too long, water his plants night and morning, until he has a good rain. From these enemies to plants, the necessity of having several beds differently situated, some convenient to water in swamps, and some on high ground well exposed, will be seen. Those plants at a proper size, as opportunity offers, are to be transplanted into hills at three feet distance.

Here it may be necessary to give some directions as to preparing the ground to receive the plants, and to notice what kind of soil is best adapted to tobacco. The same kind of land that is proper for wheat, is so for tobacco, neither of them delighting in a sandy soil. We do not think a clayey stiff soil will suit tobacco; however, let the soil be stiff or light, it ought to be made very rich, by cow-penning it on the sward, or by spreading farm-yard manure over it, except it is strong new land. We would recommend that the hills should be made in the autumn, and at about the distance of three feet, or three and a half in the row and step; by this means it has a larger surface exposed to the frost, which will assist in the pulverising and fertilizing it; a good hand may very well tend from ten to twelve thousand hills of fresh light land, or from six to ten thousand of stiff land; and we believe where the planter depends upon manuring his land for a crop, he will find it difficult to get even five thousand hills properly manured.

If the planter has time to turn over, in the month of February, the hills which were made in the fall, he will find his advantage in it; but we scarce believe that time will be found.

If the tobacco seed has been sown early in good beds, and those beds properly attended to, the planter may expect to plant his hills from them in May. The earlier tobacco is planted the better, as it will not be fit to cut in less than three months: by

planting early; tobacco will be housed in August, a month by far the best in the whole year to cut it, as it then cures of a fine bright nutmeg colour, and will have a much better scent than later tobacco. When the plants are large enough to set out, the tobacco hills must be prepared by re-working them, breaking the clods very fine, and then cutting off the top of the hill, so as to have it broad and low; it is then common to clap the hoe upon the top of it, which breaks the small clods.

Having turned as many hills as it is convenient to plant at one time, the planter should wait until a rain comes, ever so little of which, at this season of the year, will be sufficient, provided the plants can be drawn from the beds without breaking. The plants will more readily extend their roots, if set out after a moderate rain, than if planted in a very wet season. The planter should never prepare more hills than he can plant the next season, as fresh turned hills are best for the plants. In this manner proceed until the whole crop is planted. Persons may continue to plant every season until the last of June, but we think they have very little chance of making good tobacco, if they have not their whole quantity planted by that time. After the crop is pitched or planted in the manner directed, it will require the closest attention. The tobacco has at this period a very dangerous enemy in a small worm, called the ground-worm, which rises from the ground, and makes great havoc among the young and tender plants, by cutting off and eating the leaves quite into the hill. It sometimes happens, that the crop must be replanted five or six times before it can be got to stand well. The planter must then watch the first rising of the worm, and every morning his whole force must be employed in searching round each plant, and destroying it. When the tobacco begins to grow, the planter must carefully cut down the hills shelving from the plants, and take every weed and spire of grass from around the plants, without disturbing the roots. They will, after this weeding, if the weather be seasonable, grow rapidly. When they have spread over the hills pretty well, and a little before they are fit to top, about four of the under leaves should be taken off; this is called prining, and then the tobacco must have a hill given to it.

As soon as it can be topped to ten leaves, it must be done, and this by a careful hand well used to the business: he should suffer his thumb nails to grow to a considerable length, that he may take out the small bud from the top without bruising, leaving

ten leaves behind in the first or second topping, or until it grows too late for the plant to support so many leaves; then to fall to eight, and even to six: but this the skilful topper will be the best judge of, as it can be only known from experience. The tobacco is now attacked by another enemy, as dangerous and as destructive as any; it is the horn-worm, of a green colour, which grows to a large size, and, if suffered to stay on the plant, will destroy the whole. The first glut of them, as the planters call it, will be when the tobacco is in the state above-mentioned; and hands must be almost constantly employed in pulling them off and preventing their increase; but if the planter has a flock of young turkeys to turn into the field, they will effectually destroy these worms. The planter must again hill up his tobacco and lighten the ground between the hills, that the roots of the tobacco may extend themselves with ease. Immediately after topping, the tobacco begins to throw out suckers between the leaves where they join the stalk; these should be carefully taken off, for if they are suffered to grow, they greatly exhaust the plant. Not long after the first glut of worms comes a second, in greater quantities than the former, and must be treated in the same manner.

Tobacco, thus managed, will begin to ripen in the month of August, when it is to be cut, as it ripens, in order to be houted: but the planter, if he is not a judge himself, or not able to attend to it, should have a very skilful set of cutters, who know well when tobacco is ripe; for if it be cut before it is full ripe, it will never cure of a good colour, and will rot in the hoghead after it is prized. The tobacco, when ripe, changes its colour and looks greyish; the leaf feels thick, and if pressed between the finger and thumb will easily crack; but experience alone can enable a person to judge when tobacco is fully ripe.

We think the best time to cut tobacco is the afternoon, when the sun has not power to burn it, but only causes the leaves to be supple, that they may be handled without breaking; it should then remain on the ground all night; the next morning, after the dew is off, and before the sun has power to burn it, it must be picked up, but there should be no appearance of rain the preceding night; for should a heavy rain fall upon the tobacco, when lying on the ground, it will injure it greatly, by filling it with grit, and perhaps bruising it. Tobacco is indeed generally cut in the morning, but in this case it must be watched very narrowly, and picked up, and put in small heaps

on the ground, before it begins to burn ; for if it be scorched by the sun it is good for nothing.

There are different methods taken in the management of tobacco immediately after being cut, and sufficiently killed by the sun for handling : some hang upon fences until it is nearly half-cured before they carry it to hang up in houses built for the purpose ; but this mode we cannot approve of, as the leaves are too much exposed to the sun, and are apt to be injured. A much better method is, to have scaffolds made close to the house intended to cure the tobacco in ; and having a sufficient number of tobacco sticks, of about four feet and a half long, and an inch thick, to bring in the tobacco from the field, and putting from ten to fourteen or fifteen plants upon a stick, to fix the sticks upon this scaffold, about nine inches one from another. There the tobacco should remain until the leaves turn yellow. By this method the sun is prevented from coming to the leaves, and the rays only fall on the stalks. After remaining a sufficient time, the sticks should be removed with the tobacco on them, in the house, and be fixed where they are to remain until the tobacco be fully cured.

The houses built for the tobacco should be from thirty to sixty feet long, and about twenty feet wide ; the roof to have wind beams about four feet distance to fix the sticks on, and contrived at proper spaces to receive the whole of the tobacco until the house is full ; so that there should be a space of six inches between the tails of the upper plants and heads of the lower, for the air to pass through.

If a person has house-room enough, we would advise, that the tobacco should have no sun, but be carried into the house immediately after it is killed, and there hung upon the sticks. But, in this case, the plants should be very few on the sticks and the sticks at a greater distance from each other, for tobacco is very apt to be injured in the house if hung too close in a green state. If a crop could be cured in this way, without sun, its colour would be more bright, and the flavour finer, the whole juices being preserved unexhaled.

When the tobacco is fully cured in the house, which may be known by the colour of the leaf and the dryness of the stem, it may be then stripped from the stalk, when it is in a proper state, that is, in a season which moistens it so as it can be handled. As soon as the tobacco is so pliant, that it can be handled without breaking the leaves, it is to be struck from the sticks, put in bulk until it is stripped from the stalk ; which, in

the earlier part of the year, should be immediately done, lest the stalks, which are green, should injure the leaf. If the tobacco is too high in case when it is struck, it will be apt to rot when it gets into a sweat. One thing should be particularly attended to, and that is, it should be struck as it first comes into case, for if it hangs until it is too high, or moist, and you should wait until the moisture dries away to the state we advise it to be in when you strike it, it will most certainly, when in bulk, return to its full state of moisture; and therefore it should hang until it is perfectly dry; and you are to wait till another season arrives to put it in proper case.

The next thing to be done after the tobacco is struck is to strip it; and here particular attention is necessary: all the indifferent leaves are first to be pulled from the stalk, by persons well acquainted with the business, and tied by themselves, to be afterwards stemmed. The plant, with the fine leaves, is to be thrown to the strippers; they are to strip off the leaves, and tie up five leaves in a bundle, of equal goodness. When you have got enough for a hoghead, which we should advise not to be more than a thousand weight, it should be immediately packed up with very great care, and prized. The hogheads should be made of staves not exceeding forty-eight inches long, and the head ought not to be more than from thirty to thirty-two inches in diameter. No directions can be given here for the packing, it can only be learned from practice. If more tobacco than here recommended be prized into a hoghead, without much care it will be apt to be bruised, a circumstance which should be carefully avoided.

ON THE CULTURE OF INDIGO.

As the culture of this plant is in a manner confined to particular parts of the United States, the observations thereon will be concise; as, however, it may ere long be attempted, and certainly with a great probability of success, in some parts of the southern States, where it has not as yet been tried, the introduction of these remarks will need no apology.

The indigo tree is a straight and rather bushy plant; from its root arises a ligneous brittle stem, of the height of two feet, branching from the beginning, white on the inside, and covered with a greyish bark: the leaves are alternate, composed of several small leaves disposed in two rows along a

common costa, which is terminated by a single foliolum, and furnished at its basis with two small membranes which are called stipulæ: at the extremity of each branch arise clusters of reddish papilionaceous flowers, rather small, and composed of a number of petals: the stamina, to the number of six, and the pistil, surmounted with a single style, are arranged as they are in most of the herbaceous flowers: the pistil is changed into a small rounded pod, slightly curved, one inch in length, and a line and a half in breadth, full of cylindrical, shining and brownish seeds.

This plant requires a light soil, well tilled, and never deluged with water; for this reason spots are preferred which are sloping, because this position preserves the indigo plant from the stagnation of the rain, which might destroy it, and from inundations, that might cover it with a prejudicial slime. Low and flat grounds may also be employed for this culture, if channels and ditches are made to draw off the waters, and if care be taken to plant them only after the rainy season, which often occasions overflowings. The seed is sown in little furrows made by the hoe, two or three inches in depth, at the distance of a foot from each other, and in as straight a line as possible. Continual attention is required to pluck up the weeds, which would soon choak the plant. Though it may be sown in all seasons, the spring is commonly preferred. Moisture causes this plant to shoot above the surface in three or four days: it is ripe at the end of two months. When it begins to flower, it is cut with pruning-knives, and cut again at the end of every six weeks, if the weather be a little rainy: it lasts about two years, after which term it degenerates; it is then plucked up and planted afresh.

As this plant soon exhausts the soil, because it does not absorb a sufficient quantity of air and dew to moisten the earth, it is of advantage to the planter to have a vast space which may remain covered with trees, till it becomes necessary to fall them, in order to make room for the indigo; for trees are to be considered as syphons, by means of which the earth and air reciprocally communicate to each other their fluid and vegetating substance; syphons, into which the vapours and juices being alternately drawn, are kept in equilibrium. Thus while the sap ascends by the roots to the branches, the leaves drawn in the air and vapours, which circulating through the fibres of the tree descend again into the earth, and restore to it in dew what it loses in sap. It is in order to maintain this reciprocal influence, that when there are no trees to preserve the fields in a

proper state for the sowing of indigo, it is customary to cover those which are exhausted by this plant with potatoes, or lianes, the creeping branches of which preserve the freshness of the earth, while the leaves, when burnt, renew its fertility.

Indigo is distinguished into several species, of which only two are cultivated: the true indigo, which is the sort we have been speaking of, and the bastard indigo, which differs from the former, in having a much higher, more woody, and more durable stem; in having its foliola longer and narrower, its pods more curved, and its seeds black. Though the first be sold at a higher price, it is usually advantageous to cultivate the other, because it is not so frequently renewed, is heavier, and yields more leaves, the produce of which is, however, less, from any equal quantity. The first will grow in many different soils; the second succeeds best in those which are most exposed to the rain. Both are liable to great accidents in their early state. They are sometimes burnt up by the heat of the sun, or choaked by a web with which they are surrounded by an insect peculiar to these regions. Sometimes the plant becomes dry, and is destroyed by another very common insect; at other times, the leaves, which are the valuable part of the plant, are devoured in the space of twenty-four hours by caterpillars. This last misfortune, which is but too common, hath given occasion to the saying, that "the planters of indigo went to bed rich, and rose in the morning totally ruined."

This production ought to be gathered in with great precaution, for fear of making the farina that lies on the leaves, and which is very valuable, fall off by shaking it. When gathered, it is thrown into the steeping-var, which is a large tub filled with water. Here it undergoes a fermentation, which in twenty-four hours at farthest is completed. A cock is then turned, to let the water run into the second tub, called the mortar or pounding-tub. The steeping-var is then cleaned out, that fresh plants may be thrown in; and thus the work is continued without interruption.

The water which hath run into the pounding-tub, is found impregnated with a very subtle earth, which alone constitutes the dregs or blue substance that is the object of this process, and which must be separated from the useless salt of the plant, because this makes the dregs swim on the surface. To effect this, the water is forcibly agitated with wooden buckets that are full of holes, and fixed to a long handle. This part of the

process requires the greatest precaution. If the agitation be discontinued too soon, the part that is used in dying, not being sufficiently separated from the salt, would be lost. If on the other hand, the dye were to be agitated too long after the complete separation, the parts would be brought together again, and form a new combination; and the salt re-acting on the dregs would excite a second fermentation, that would alter the dye, spoil its colour, and make what is called burnt indigo. These accidents are prevented by a close attention to the least alterations that the dye undergoes, and by the precaution which the workmen take to draw out a little of it from time to time in a clean vessel. When they perceive that the coloured particles collect by separating from the rest of the liquor, they leave off shaking the buckets, in order to allow time to the blue dregs to precipitate to the bottom of the tub, where they are left to settle till the water is quite clear. Holes made in the tub at different heights are then opened one after another, and this useless water is let out.

The blue dregs remaining at the bottom having acquired the consistence of a thick muddy liquid, cocks are then opened, which draw it off into the settler. After it is still more cleared of much superfluous water in this third and last tub, it is drained into sacks; from whence, when water no longer filters through the cloth, this matter, now become of a thicker consistence, is put into chests, where it entirely loses its moisture. At the end of three months the indigo is fit for sale.

ON THE CULTURE OF RICE.

The culture of this plant, like the former, is confined to certain individual States. Low swampy lands are the only situations that have been deemed to offer a prospect of success from its cultivation; but as such situations are frequently found in the newly-settled parts of the Union, a few observations on it will not be foreign to our object of affording every possible information to European settlers.

Rice is a plant very much resembling wheat in shape and colour, and in the figure and disposition of its leaves. The panicle which terminates the stem is composed of small flowers, distinct from each other, which have four unequal scales, six stamens, and one pistil, surrounded with two styles: this pistil becomes a white seed, extremely farinaceous, covered with two interior scales, which are larger, yellowish, covered with light asperities, and furnished with several salient costæ, the middle one of which terminates in an elongated extremity. This plant thrives best in

low, damp and marshy lands, when they are even a little overflowed. The period of its discovery is traced to the remotest antiquity.

Egypt, unfortunately for itself, first attended to it. The pernicious effect of this culture, rendered the country the most unhealthy in the known world; constantly ravaged by epidemical disorders, and afflicted with cutaneous diseases, which passed from that region to the others, where they have been perpetuated during whole centuries, and where they have been only put a stop to by the contrary cause to that which had occasioned them; to wit, the drying up of the marshes, and the restoring of salubrity to the air and to the waters. China and the East-Indies must experience the same calamities, if art doth not oppose preservatives to nature, whose benefits are sometimes accompanied with evils; or if the heat of the torrid zone doth not quickly dispel the damp and malignant vapours which are exhaled from the rice grounds. It is a known fact, that in the rice grounds of the Milanese, the cultivators are all livid and dropical.

A great degree of the unhealthiness of part of Georgia and South-Carolina is attributable to the same cause. Could the wild, or as it is termed, the mountain rice, be improved by cultivation so as to supersede the culture of that grain in swamps, it would be a material benefit to society; from experiments that have been made, there is some reason for hoping this may ere long be the case.

ON THE CULTURE OF HEMP.

Hemp is as profitable a production as any the earth furnishes, and in point of utility, yields to few articles whatever. The manufacture of it employs numbers of individuals, a great portion of whom are women and children, and it finds a constant employment for the farmers otherwise leisure time. Its advantages, either raw or manufactured, are, indeed, great to the farmer and merchant; but as many American farmers manufacture a considerable portion in their own families, the importance of the cultivation thereof is still farther manifest.

The usual height of the plant, when growing, is from five to six feet, but this varies very considerably according to circumstances. That which is cultivated near Bischwiller, in Alsace, is sometimes more than twelve feet high, and upwards of three inches in circumference, the stalks being so deeply rooted, that a very strong man can scarce pull them up. Mr. Arthur Young, in a tour through Catalonia in Spain, says, that where the coun-

try is well watered, the crops of hemp are extraordinary, and that the plants generally rise to the height of seven feet. In Italy hemp is generally cultivated, though the Bolognese only can pretend to any superiority in the management of it. It is there sown upon their best land, which are rich strong loams, and on which they are at all possible pains to procure a fine friable surface. For manure they use dung, pieces of rotten cloth, feathers, and horns brought from Dalmatia. The plant, however, may be cultivated upon ground of every kind; the poorer land producing that which is finer in quality though in smaller quantity, whereas strong and rich land produces a great quantity, but coarser; it does not exhaust the land on which it grows like flax, whence it is probable, that if properly managed, and care taken in the cultivation, it might be found to supersede flax entirely. A Suffex manufacturer, who writes on this subject in the *Annals of Agriculture*, informs us, that it may be raised for many years successively on the same ground, provided it be well manured. An acre requires from nine to twelve pecks, according to the nature of the soil; the latter being the most usual, though a variation in the quality of the soil makes an alteration both in the quantity and quality of the hemp. An acre produces on an average thirty-six or thirty-eight stone. The Abbé Brulle, in a treatise upon the culture and management of hemp, printed by order of the Lords of the Committee of Council for trade and foreign plantations, informs us, that the season for sowing extends from the 25th of March to the 15th of June. The seed ought always to be sown thin, not exceeding two bushels to an acre, and if you have the advantage of a drill plough, still less will answer. As there are two kinds of hemp, the male and female, of which the former only produces seed, some regard must be had to this circumstance. In some parts of England, the male and female are pulled together about thirteen weeks after the sowing, but in others they are frequently separated. This last method is recommended by the Abbé Brulle, who, for the more easy accomplishment of it, directs that little paths should be made lengthwise through the field at about seven feet distance from each other, to allow a passage for the person who pulls up the female hemp from among the other, the latter requiring to stand more than a month after for the purpose of ripening the seeds. The female hemp is known to be ripe by the fading of the flowers, the falling of the farina secundans, and some of the stalks turning yellow. After the whole of this kind is pulled, it must be manufactured according to the directions hereafter given, and

ought to be worked, if possible, while green; the hemp thus produced, being much finer than that which is previously dried. The reason of this is, that the plant contains a great quantity of glutinous matter, which being once dried, agglutinates the fibres in such a manner, that they can never be afterwards perfectly separated; the female hemp, however, is always in smaller quantity than the male, and therefore where the crop is large, it will be impossible to work the whole as fast as it is pulled or cut. It is known to be ripe by the stems becoming pale; but it must be remembered, that hemp of any kind will be much less injured by pulling the plants before they are ripe, than by letting them stand too long.

The male hemp being stripped of its leaves, &c. as afterwards directed, will soon be dry for storing by the heat of the atmosphere, though sometimes it may be necessary to use artificial means; but where these are used, the utmost care must be taken, hemp, when dry, being exceedingly inflammable. The stored or dried hemp must be steeped and treated in every other respect as though it had been green; whence it is evident, that this operation ought never to be used but in cases of necessity. It is likewise difficult to make hemp which has been dried previous to its being steeped, so white as that which has been worked green.

With regard to the perfecting of hemp seed for a subsequent season, it would seem proper to set apart a piece of ground for this purpose; for M. Aimen, from forty plants raised in the common way, had only a pound and an half of seed, though the plants from which it was taken might be deemed fine; whereas, from a single plant which grew by itself, he had seven pounds and an half. Some are of opinion, that by putting the clusters which contain the hemp seed to heat and sweat, the quality is improved; as many of those seeds which would otherwise wither and die, may thus arrive at perfection. This, however, seems to be very problematical, as there are no experiments which show that seeds, when separated from the vegetable producing them, have any power of meliorating themselves.

After the hemp is pulled, it must be taken in large handfuls, cutting off the roots, though this is not absolutely necessary, the leaves, seeds, and lateral branches, being dressed off with a wooden sword or ripple. It is then to be made up into bundles of twelve handfuls each, in order to be steeped, like flax, in water. This, or something similar, is absolutely necessary, in order to separate

the bark, which is properly the hemp, from the reed or woody part. This operation is called *water-retting*; but sometimes a mere exposure to the air is substituted in its place, turning the hemp frequently during the time it is exposed: this is called *dew-retting*, but the former method is universally deemed preferable. Such hemp as is designed for seed is seldom water-retted, though, in the opinion of the manufacturer already quoted, it would be better if it were so. Dew-retted hemp is generally stacked and covered during the winter; in January and February it is spread upon meadow land, and whitens with the frost and snow, though it is always much inferior to the other, and proper for coarser yarns only.

The length of time required for steeping hemp is various, and a complete knowledge of it can only be attained by practice. It is usual to continue the immersion four, five, or six days; standing water is preferred, and the same water will steep hemp three times during the season, but the first has always the best colour. The Abbé Brulle prefers clear and running water, especially if overhung with trees. The bundles are to be crosswise upon each other, taking particular notice of the manner in which they lie when put in, that they may be taken out without difficulty. His time of steeping is from six to eleven days; and here we must observe, that it is much better to let it remain too long in the water than too short a time. The slenderest hemp requires the most soaking. The operation is known to be finished by the reed separating easily from the bark.

After the hemp is thoroughly steeped, the next operation is to separate the bark from the reed or woody part; and this may be done in two ways, viz. either pulling out the reed from every stalk with the hand, or drying and breaking it like flax. The Abbé Brulle is very particular in his directions for this last operation, which he calls *reeding*, and which may be performed either in a trough under water, or upon a table. The whole, however, may be reduced to the following, viz. pressing down the bundles either in the trough or on a table by proper weights, to keep the hemp steady on the middle or top end; then beginning at the upper part of the bundle, pull out the reeds one by one. As you proceed, the rind which remains will press closely upon the remaining unreeded hemp, and keep it more steady, so that you may take two, four, or even six stalks at a time. The weight is then to be removed from the top, and all the pieces of reed which remain there having brok-

en off in the former operation, are to be taken out. Lastly, the middle weight is to be taken off, and any small pieces which remain there taken out. If the reeding is performed on a table, the bundle must be weeded frequently, though slightly; a continual dropping of water would perhaps be the best method.

After the hemp is reeded, it must next be freed from the mucilaginous matter with which it still abounds. This is done by pouring water through it, squeezing out the liquid after every affusion, but taking care not to let the threads twist or entangle each other, which they are very apt to do. The Abbé is of opinion, that soft soap should be dissolved in the last water, in the proportion of an ounce to three pounds of dry hemp; which though not absolutely necessary, contributes much to the softening and rendering the hemp easy and pleasant to dress.

Hemp is broken by machinery, after being steeped, in a manner similar to flax, but the instruments generally used for this purpose are all worked by the hand. That which breaks in the operation is called *shorts*, and is about half the value of long hemp.

Beating of hemp is the next operation, which formerly was performed entirely by hand, but now in most places by a water mill, which rises three or four heavy beaters that fall upon it alternately; the hemp being turned all the while by boys in order to receive the strokes equally. The finer it is required to make the tow, the more beating is necessary. It is then dressed or combed by drawing it through heckles formed like the combs of wool manufacturers, only fixed. Sometimes it is divided into two or three sorts of tow, and sometimes in common heavy work, the whole is worked together into one sort; the prices varying from six-pence to one shilling and six-pence per pound.

ON THE CULTURE OF FLAX.

The following particulars with regard to the manner of raising flax, has been for some years past warmly recommended by the trustees for fisheries, manufactures, and improvements in Scotland.

A skilful flax raiser always prefers a free open deep loam, and all grounds that produced the preceding year a good crop of turnips, cabbage, potatoes, barley, or broad clover; or have been formerly laid down rich, and kept for some years in pasture.

A clay soil, the second or third crop after being limed, will answer well for flax; provided, if the ground be still stiff, that it be brought to a proper mould, by tilling after harvest, to expose it to the winter frosts.

All new grounds produce a strong crop of flax, and pretty free of weeds. When a great many mole-heaps appear upon new ground, it answers the better for flax after one tilling.

Flax seed ought never to be sown on grounds that are either too wet or dry, but on such as retain a natural moisture; and such grounds as are inclined to weeds ought to be avoided, unless prepared by a careful summer fallow.

If the seed be sown early, and the flax not allowed to stand for seed, a crop of turnips may be got after the flax the same year; the second year a crop of bear or barley may be taken; and the third year, grass seeds are sometimes sown along with the flax seed. This is the method mostly practised in and about the counties of Lincoln and Somerset, in England, where great quantities of flax and hemp are every year raised, and where these crops have long been capital articles. There, old ploughed grounds are never sown with lint seed, unless the soil be very rich and clean.

If the ground be free and open, it should be but once ploughed, and that as shallow as possible, not deeper than two inches and an half. It should be laid flat, reduced to a fine garden mould by much harrowing, and all stones and sods should be carried off.

Except a little pigeon's dung for cold or sour ground, no other dung should be used preparatory for flax, because it produces too many weeds, and throws up the flax thin and poor upon the stalk.

Before sowing, the bulky clods should be broken, or carried off the ground; and stones, quickenings, and every other thing that may hinder the growth of the flax, should be removed.

The brighter in colour, and heavier the seed is, so much the better; that which when bruised, appears of a light or yellowish green, and fresh in the heart, oily and not dry, and smells and tastes sweet, and not fusty, may be depended upon.

Dutch seed of the preceding year's growth, for the most part, answers best; but it seldom succeeds if kept another year. It ripens sooner than any other foreign seed. Philadelphia seed produces fine lint and few bolls, because sown thick, and answers best in wet cold soils. Riga seed produces coarser lint, and the greatest quantity of seed. Scots seed, when well win-

nowed and kept, and changed from one kind of soil to another, sometimes answers pretty well, but should be sown thick, as many of its grains are bad, and fail. It springs well, and its flax is sooner ripe than any other; but its produce afterwards is generally inferior to that from foreign seed.

The quantity of seed sown should be proportioned to the condition of the soil; for if the ground be in good heart, and the seed sown thick, the crop will be in danger of falling before it is ready for pulling.

The time for sowing flax seed is from the middle of March to the end of April, as the ground and season answers; but the earlier the seed is sown, the less the crop interferes with the corn harvest.

Late sown flax seed may grow long, but the flax upon the stalk will be thin and poor.

After sowing, the ground ought to be harrowed till the seed is well covered, and then, supposing the soil, as before mentioned, to be free and reduced to a fine mould, it ought to be rolled.

When a farmer sows a large quantity of seed, he may find it proper to sow a part earlier and part later, that in the future operations of weeding, pulling, watering and grafting, the work may be the easier and more conveniently gone about.

It ought to be weeded when the crop is about four inches long. If longer deferred, the weeders will so much break and crook the stalks, that they will never perhaps recover their straightness again; and when the flax grows crooked, it is more liable to be hurt in the rippling and swingling.

Quicken grafts should not be taken up, for being strongly rooted, the pulling of it always loosens a deal of the flax.

If there is an appearance of a settled drought, it is better to defer the weeding, than by that operation to expose the tender roots of the flax to the drought.

When the crop grows so short and branchy, as to appear more valuable for seed than flax, it ought not to be pulled before it be thoroughly ripe; but if it grows long and not branchy, the seed should be disregarded, and all the attention given to the flax. In the last case it ought to be pulled after the bloom has fallen, when the stalk begins to turn yellow, and before the leaves fall, and the bolls turn hard and sharp-pointed.

When the stalk is small, and carries few bolls, the flax is fine; but the stalk of coarse flax is gross, rank, branchy, and carries many bolls.

When the flax has fallen and lies, such as lies ought to be immediately pulled, whether it has grown enough or not, as otherwise it will rot altogether.

When parts of the same field grow unequally, so that some parts are ready for pulling before other parts; only what is ready should be pulled, and the rest should be suffered to stand till ready.

The flax-raiser ought to be at pains to pull, and keep by itself, each different kind of lint which he finds in his field; what is both long and fine, by itself; what is both long and coarse, by itself; what is both short and fine, by itself; what is both short and coarse, by itself; and in like manner every other kind by itself that is of the same size and quality. If the different kinds be not thus kept separate, the flax must be much damaged in the watering and other succeeding operations.

What is commonly called *under growth*, may be neglected as useless.

Few persons that have seen pulled flax, are ignorant of the method of laying it in handfuls across each other, which gives the flax sufficient air, and keeps the handfuls separate and ready for the rippler.

If the flax be more valuable than the seed, it ought by no means to be stacked up, for its own natural juice assists it greatly in the watering; whereas, if kept long unwatered, it loses that juice, and the harle adheres so much to the boon, that it requires longer time to water, and even the quality of the flax becomes thereby harsher and coarser. Besides the flax stacked up over year, is in great danger from vermin and other accidents; the water in spring is not so soft and warm as in harvest, and near a year is thereby lost of the use of the lint: but if the flax be so short and branchy as to appear most valuable for seed, it ought, after pulling, to be stooked and dried upon the field, as is done with corn; then stacked up for winter, rippled in spring; and after shelling, the seed should be well cleaned from bad seeds, &c.

After pulling, if the flax is to be regarded more than the seed, it should be allowed to lie some hours upon the ground, to dry a little, and to gain some firmness, to prevent the skin or harle, which is the flax, from rubbing off in the rippling; an operation which ought by no means to be neglected, as the bolls, if put into the water along with flax, breed vermin there, and otherwise spoil the water. The bolls also prove very inconvenient in the grassing and breaking.

The handfuls for rippling should not be great, as that endangers the lint in the rippling comb.

After rippling, the flax-raiser will perceive, that he is able to assort each size and quality of the flax by itself more exactly than he could before.

A running stream wastes the lint, makes it white, and frequently carries it away. Lochs, by the great quantity and motion of the water, also waste and whiten the flax, though not so much as running streams. Both rivers and lochs water the flax quicker than canals.

But all flax ought to be watered in canals or ponds, which should be dug in clay ground if possible, as that soil retains the water best, but if a firm retentive soil cannot be got, the bottom or sides of the canal, or both the bottom and sides, may be lined with clay; or, instead of lining the sides with clay, which might fall down, a ditch may be dug without the canal, and filled with clay, which will prevent both extraneous water from entering, and the water within from running off.

A canal of forty feet long, six broad, and four deep, will generally water the growth of an acre of flax.

It ought to be filled with fresh soft water from a river or brook, if possible, two or three weeks before the flax is put in, and exposed all that time to the heat of the sun. The greater way the river or brook has run, the softer, and therefore the better will the water be. Springs, or short-runs from hills, are too cold, unless the water is allowed to stand long in the canal. Water from coal or iron is very bad for flax. A little of the powder of galls thrown into a glass of water, will immediately discover if it comes from minerals of that kind, by turning it into a dark colour, more or less tinged in proportion to the quantity of vitriol it contains.

The canal ought not to be under shade; which, besides keeping the sun from softening the water, might make part of the canal cooler than other parts, and so water the flax unequally.

The flax-raiser will observe, when the water is brought to a proper heat, that small plants will be rising quickly in it, numbers of small insects and reptiles will be generating there, and bubbles of air rising on the surface. If no such signs appear, the water is either not warm enough, or is otherwise unfit for flax.

Moss holes, when neither too deep nor too shallow, frequently answer well for watering flax, when the water is proper, as before described.

The proper season for watering flax is from the end of July to the end of August.

The advantage of watering flax as soon as possible after pulling has been already mentioned.

The flax being sorted after rippling, as before mentioned, should next be put into beets, never larger than a man can grasp with both his hands, and tied very slack with a band of a few stalks. Dried rushes answer exceedingly well for binding flax, as they do not rot in the water, and may be dried and kept for use again.

The beets should be put into the canals or ponds slope ways, or half standing upon end, the root end uppermost. Upon the crop ends, when uppermost, there frequently breeds a deal of vermin, destructive of the flax, which is effectually prevented by putting the crop end downmost.

The whole flax in the canal ought to be carefully covered from the sun with divots; the grassy side of which should be next the flax, to keep it clean. If it is not thus covered, the sun will discolour the flax, though quite covered with water. If the divots are not weighty enough to keep the flax entirely under water, a few stones may be laid above them. But the flax should not be pressed to the bottom.

When the flax is sufficiently watered, it feels soft to the gripe, and the harle parts easily with the boon or show, which last is then become brittle, and looks whitish. When these signs are found, the flax should be taken out of the water, beet after beet; each gently rinsed in the water, to cleanse it of the nastiness which has gathered about it in the canal; and as the lint is then very tender, and the beet slackly tied, it must be carefully and gently handled.

Great care ought to be taken that no part be overdone; and as the coarsest waters soonest, if different kinds be mixed together, a part will be rotted, when the rest is not sufficiently watered.

When flax taken out of the canal is not found sufficiently watered, it may be laid in a heap for twelve, eighteen, or twenty-four hours, which will have an effect like more watering; but this operation is nice, and may prove dangerous in unskilful hands.

After the flax is taken out of the canal, fresh flax should not be put a second time into it, until the former water be run off, and the canal cleaned, and supplied with fresh water.

Short heath is the best field for grafting flax, as when wet, it fastens to the heath, and is thereby prevented from being blown away by the wind. The heath also keeps it a little above the earth, and so exposes it the more equally to the weather. When such heath is not to be got, links or clean old lea ground is the next best. Long grafs grounds should be avoided, as the grafs growing through the lint frequently spots, tenders, or rots it; and grounds exposed to violent winds should also be avoided.

The flax, when taken out of the water, must be spread very thin upon the ground, and being then very tender, it must be gently handled. The thinner it is spread the better, as it is then the more equally exposed to the weather. But it ought never to be spread during a heavy shower, as that would wash and waste the harle too much, which is then excessively tender, but soon after becomes firm enough to bear the rains, which, with open air and sunshine, cleans, softens, and purifies the harle to the degree wanted, and makes it blister from the boon. In short, after the flax has got a little firmness by being a few hours spread in dry weather, the more rain and sunshine it gets the better.

If there be little danger of high winds carrying off the flax, it will be much the better for being turned about once a week. If it is not to be turned, it ought to be very thin spread. The spreading of flax and hemp requires a deal of ground, but amply repays by enriching it greatly.

The skilful flax-raiser spreads his first row of flax at the end of the field opposite to the point from whence the most violent wind commonly comes, placing the root ends foremost; he makes the root ends of every other over-lap the crop ends of the former row three or four inches, and binds down the last row with a rope; by which means the wind does not easily get below the lint to blow it away: and as the crop ends are seldom so fully watered as the root ends, the aforesaid over-lapping has an effect like giving the crop ends more watering. Experience only can fully teach a person the signs of flax being sufficiently grafted; then it is of a clearer colour than formerly, the harle is blistered up, and easily parts with the boon, which is then become very brittle. The whole should be sufficiently grafted before any of it is lifted: for if a part be lifted

sooner than the rest, that which remains is in great danger from the winds.

A dry day ought to be chosen for taken up the flax; and if there be no appearance of high wind, it should be loosed from the heath or grafs, and let loose for some hours, to make it thoroughly dry.

As a great quantity of flax can scarcely be all equally watered and grafted, and as the different qualities will best appear at lifting the flax off the grafs; therefore at that time each different kind should be gathered together, and kept by itself, that is, all of the same colour, length and quality.

The smaller the beets it is made up in, the better for drying, and the more convenient for stacking, housing, &c. and in making up these beets, as in every other operation upon flax it is of great consequence that the lint be laid together as it grew, the root ends together and the crop ends together.

With respect to the dressing of flax, for many ages it was the practice to separate the boon or core from the flax, which is the bark of the plant, beating it with a mallet, or more dexterously with the break, a simple and more convenient method than the former.

These methods of breaking the flax are, however, slow and very laborious. A water mill was invented in Scotland about forty years ago, which, with some late improvements, makes great dispatch, and in skilful and careful hands gives satisfaction. It has been generally constructed to break the boon by three dented rollers, placed one above the other. The middle one of which, being forced quickly round, takes the other two along with it, and one end of the handfuls of the flax being by the workmen directed in between the upper and middle rollers, the flax is immediately drawn in by the rollers; a curved board or plate of tin behind the rollers directs the flax to return again between the middle and undermost rollers; and thus the operation is repeated until the boon be sufficiently broke. Great weights of timber or stone at the ends of levers, press the upper and under rollers towards the middle one.

The scutching, which was formerly done by hand, is likewise carried on by the mill in the following manner: four arms, something like hand-scutchers, project from a perpendicular axle; a box around the axle incloses these projecting scutchers; and this box is divided among the workmen, each having sufficient room to stand and handle his flax, which, through slits in the upper part and sides of the box, they hold

in to the stroke of the scutchers, which moving round horizontally, strike the flax across or at right angles, and so thresh out or clear it of the boon.

The breaking of the flax by rollers is scarcely subject to any objection, but that it is dangerous to workmen not sufficiently on their guard, who sometimes allow the rollers to take hold of their fingers, and thereby their whole arm is instantly drawn in: thus many have lost their arms. To avoid this danger, a break, upon the general principles of the hand-break before described, has been lately adapted to water machinery, and used in place of rollers. The horizontal stroke of the scutchers was long thought too severe, and wasteful of the flax; but very careful experiments have discovered that the waste complained of must be charged to the unskilfulness or negligence of the workmen, as in good hands the mill carries away nothing but what, if not so scutched off, must be taken off in the heckling with more loss, both of time and flax. But to obviate this objection of the violence of the horizontal scutchers, an imitation of hand-scutching has lately been applied to water. The scutchers then project from an horizontal axle, and move like the arms of a check reel, striking the flax neither across nor perpendicularly down, but sloping in upon the parcel exactly as the flax is struck by the hand-scutcher. This sloping stroke is got by raising the scutching stock some inches higher than the center of the axle, and by raising or lowering the stock over which the flax is held, or screwing it nearer to or farther from the scutchers, the workmen can temper or humour the stroke almost as he pleases.

A lint-mill, with horizontal scutchers upon a perpendicular axle, requires a house of two stories, the rollers or break being placed in the ground story, and the scutchers in the loft above; but a mill with vertical scutchers on an horizontal axle, requires but one ground story for all the machinery.

Another method of breaking and scutching flax, more expeditious than the old hand methods, and more gentle than water mills, has also been invented in Scotland. It is much like the break and scutcher giving the sloping stroke last described, moved by the foot. The treddle is remarkably long, and the scutchers are fixed upon the rim of a fly wheel. The foot break is also assisted in its motion by a fly. These foot machines are very useful where there are no water mills, but they are far inferior to the mills in point of expedition.

The next operation that flax undergoes after scutching is heckling. The heckle is firmly fixed to a bench before the workman, who strikes the flax upon the teeth of the heckle, and draws it through the teeth. To persons unacquainted with this kind of work, this may seem a very simple operation; but, in fact, it requires as much practice to acquire the slight of heckling well, and without waisting the flax, as any other operation in the whole manufacture of linen. They use coarser and wider toothed heckles, or finer, according to the quality of the flax, generally putting the flax through two heckles, a coarser one first, and next a fine one.

The following observations, first published in the Gentleman's Magazine for June 1787, seem worthy of very particular attention, and may not therefore be improperly subjoined as a supplement to the present article.

“ The intention of watering flax is, in my opinion, to make the boon more brittle or friable, and by soaking, to dissolve that gluey kind of sap that makes the bark of plants and trees adhere in a small degree to the woody part. The bark of flax is called the *harle*, and when separated from the useless woody part, the *boon*, this harle itself is called flax. To effect this separation easily, the practice has long prevailed, of soaking the flax in water to certain degree of fermentation, and afterwards drying it. For this soaking some prefer rivulets that have a small current, and others stagnant water in ponds and lakes. In both methods the water acts as in all other cases of infusion and maceration; after two or three weeks it extracts a great many juices of a very strong quality, which in ponds give the water an inky tinge and offensive smell, and in rivulets mix in the stream and kill the fish. Nay, if this maceration be too long continued, the extracted and fermented sap will completely kill the flax itself. For if instead of two or three weeks, the new flax were to lie soaking in the water four or five months, I presume it would be good for nothing but to be thrown upon the dunghill; both harle and boon would in time be completely rotted; yet the harle or flax, when entirely freed from this sap, and manufactured into linen, or into ropes, might lie many months under water without being much damaged; as linen, it may be washed and steeped in scalding water twenty times without losing much of its strength, and as paper, it acquires a kind of incorruptibility.

“ It appears then essential to the right management of new flax, to get rid of this pernicious vegetative sap, and to mace-

rate the boon; but from the complaints made against both the methods of watering now in use, there is reason to think that there is still great room for improvement in that article. In rivulets, the vegetative sap, as it is dissolved, is carried off by the current, to the destruction of the fish. This prevents the flax from being stained; but the operation is tedious, and not complete, from the uncertainty of knowing when it is just enough, and not too much, or perhaps from neglect. In ponds, the inky tinge of the water often serves as a kind of dye to the flax, which imbibes it so strongly, that double the labour in bleaching will hardly bring the linen made of such flax to an equality in whiteness with linen made of flax untinged. This seems to be equally unwise as though we were to dye cotton black first, in order to whiten it afterwards. These ponds, besides, become a great nuisance to the neighbourhood; the impregnated water is often of such a pernicious quality, that cattle, however thirsty, will not drink of it, and the effluvia of it may perhaps be nearly as infectious as it is offensive. If this effluvia is really attended with any contagious effects in our cold climate, a thing worth the inquiring into, how much more pernicious must its effects have been in the hot climate of Egypt, a country early noted for its great cultivation of flax?

“ I have often thought that the process of watering might be greatly improved and shortened by plunging the new flax, after it is rippled, into scalding water; which, in regard to extracting the vegetative sap, would do in five minutes more than cold water would do in a fortnight, or perhaps more than cold water could do at all, in respect to the clearing the plant of sap. Rough almonds, when thrown into scalding water, are blanched in an instant; but perhaps a fortnight's macerating those almonds in cold water would not make them part so easily with their skins, which are the same to them as the bark is to the flax. Where tea leaves to be infused in cold water a fortnight, perhaps the tea produced by that infusion would not be so good to the taste, nor so strongly tinged to the eye, as what is effected by scalding water in five minutes. By the same analogy, I think, flax or any small twig would be made to part with its bark much easier and quicker by being dipped in boiling water than by being steeped in cold water.

• This reflection opens the door for a great variety of new experiments in regard to flax. I would therefore recom-

mend to gentlemen cultivators and farmers, to make repeated trials upon this new system, which would soon ascertain whether it ought to be adopted in practice or rejected. One thing, I think, we may be certain of, that if the Egyptians watered their flax in our common manner, they undoubtedly watered it in very warm water, from the great heat of their climate, which would probably make them neglect to think of water heated by any other means than that of the sun. A good general practice can only be established upon repeated trials. Though one experiment may fail, another with a little variation may succeed; and the importance of the object desired to be obtained will justify a good degree of perseverance in the prosecution of the means. In this view, as the Chinese thread is said to be very strong, it would be worth while to be acquainted with the practice of that distant nation, in regard to the rearing and manufacturing of flax, as well as with the methods used by the Flemings and the Dutch.

“ Boiling water, perhaps, might at once clear the new flax from many impurities, which, when not removed till it be spun into yarn, are then removed with difficulty, and the loss of substance to the yarn. Why should not the longitudinal fibres of the flax, before they be spun into yarn, be made not only as fine but as clean as possible? Upon the new system proposed, the act of bleaching would begin immediately after the rippling of the flax, and a little done then, might perhaps save much of what is generally done after the spinning and weaving. To spin dirty flax with a view of cleaning it afterwards, appears to be the same impropriety as though we were to reserve part of the dressing given to leather till after it is made into gloves.

“ Should the plunging of the flax into the boiling water not suffice to make the boon brittle enough, as I am inclined to think it would not, then the common watering might be added; but in that case, probably half the time usually given to this watering would suffice, and the flax might then be laid in clear rivulets, without any apprehension of its infecting the water and poisoning the fish, or of being discoloured itself; for the boiling water into which it had been previously put, would have extracted all the poisonous vegetative sap, which I presume is what chiefly discolours the flax or kills the fish.

“ On the supposition that the use of boiling water in the preparation of flax may be found to be advantageous and profitable, I can recollect at present but one objection against its being generally adopted. Every flax grower, it may be said,

could not be expected to have conveniences for boiling water sufficient for the purpose; the consumption of water would be great, and some additional expense would be incurred. In answer to this I shall observe, that I presume any additional expense would be more than reimbursed by the better marketable price of the flax; for otherwise any new improvement, if it will not quit cost, must be dropt, were it even the searching after gold. In a large cauldron a great deal of flax might be dipt in the same water, and the consumption perhaps would not be more than a quart to each sheaf. Even a large household pot would be capable of containing one sheaf after another; and I believe the whole objection would be obviated, were the practice to prevail as in Flanders and Holland, that the flax-grower and flax-dresser should be two distinct professions.

“ I shall conclude with recommending to those who are inclined to make experiments, not to be discouraged by the failure of one or two trials. Perhaps the flax, instead just plunged into the scalding water, ought to be kept in it five minutes, perhaps a quarter of an hour, perhaps a whole hour. Should five minutes, or a quarter of an hour, or an hour, not be sufficient to make the boon and harle easily separate, it might perhaps be found expedient to boil the flax for more than an hour; and such boiling when in this state, might in return save several hours boiling in the article of bleaching. It is not, I think, at all probable that the boiling of the flax with the boon in it would prejudice the harle; for in the course of its future existence, it is made to be exposed twenty or forty times to this boiling trial, and if not detrimental in the one case, it is to be presumed it would be detrimental in the other. Perhaps, after the boiling, it would be proper to pile up the flax in one heap for a whole day, or for half a day, to occasion some fermentation; or, perhaps, immediately after the boiling, it might be proper to wash it with cold water. The great object, when the flax is pulled, is to get the harle from the boon with as little loss and damage as possible; and if this is accomplished in a more complete manner than usual, considerable labour and expense will be saved in the future manufacturing of the flax. On this account I think much more would be gained than lost, were the two or three last inches of the roots of the stems to be chopped off, or clipt off, previous to the flax being either watered or boiled. When the flax is watered, care should be taken not to spread it out to dry, when there is a hazard of its being exposed in its wet state to frost.”

ON THE CULTIVATION OF THE VINE.

In several preceding parts of this work we have mentioned the advantages the United States possess for the culture of the vine, and, of consequence, for the making wines of a superior kind; as the attempts made have in many parts succeeded, and as many American farmers have attended to it of late, we shall need no apology for introducing the following essay on the culture of the vine, and the making and preserving of wines suited to the different climates of the United States.

Whoever considers the general climate of North-America, the soil, the seasons, the serenity and dryness of the air, the length and intenseness of the heat, the fair and moderate weather that generally prevails in the fall, when grapes are coming to maturity, and arrive at their greatest perfection; whoever compares the present state of the air, with what it was formerly, before the country was opened, cleared and drained, will find, that they are every year fast advancing to that pure and perfect temperament of air, fit for making the best and richest wines of every kind.

Such has been the bounty and goodness of heaven, that there are vines adapted to every country, to every region, from fifty degrees both north and south latitude down to the equator; and the countries beyond these may easily be supplied by traffic, so that all the sons of men may partake of this general, this universal blessing.

It is not every vine that is fit for every country; some are earlier, some are later ripe; some are tender and delicate, and will not stand the severity of winter; others are hardy and robust, and will stand any weather. Hereafter we shall range them in proper and distinct classes, and adapt the different sorts by name to the different climates in America, where they may be propagated with safety and to the best advantage.

A vine, from a stick or cutting, begins to bear fruit the third year, the fourth year it bears more, and the fifth year the planter may make wine; and from that time until it attains the full age of man, it increases in value and yields a richer wine; and, if from the beginning the vine is carefully pruned, duly manured and properly cultivated, it will amply reward for all the labour, expense and care, bestowed on it, and will hold good above an hundred years, as most writers affirm; but then it must be tended by a careful and steady hand, for it will

not bear to be slighted or neglected: if the ground is not manured and kept in good heart, the vine will bear no fruit; if the planter neglects to cultivate the soil and keep it clean, the fruit will be knotty and starved, and will not come to maturity; if he suffer the stakes or props to fall, and the vine to sprawl on the ground, the fruit will not ripen, but remain austere, and will not make good wine. Wine is too rich a juice to be made from a barren soil, or by lazy idle slovens; such men should never undertake a vineyard; they not only hurt themselves, but hinder others, who are fit for the undertaking, from making the attempt. If a vineyard does not succeed, the fault is in the man, not in the vine: it will flourish and prosper under a careful and diligent hand, but it will degenerate and run wild under the hand of sloth and idleness. A gentleman of Rome, who took great delight in vineyards, some of which he had raised with his own hands, wrote a very elegant piece upon the culture of wines, and in the most pathetic terms recommends it to the people of Italy, as the most profitable as well as agreeable and amusing undertaking. Among many other encouragements, he tells them this story: "Pavidius Veterensis, a neighbour of my uncle, had a vineyard and two daughters. Upon the marriage of one of them, he gave with her as her dowry one-third of his vineyard; and then doubled his diligence, and cultivated the remainder so well, that it yielded him as much as the whole had done before: upon the marriage of the other daughter, he gave with her one other third of his vineyard; and now having but one-third part of the whole left, he so manured and cultivated it, that it yielded him full as much as the whole had done at first."

This ingenious author accuses many of his countrymen of having begun this work with seeming resolution, and of having carried it on for some time with assiduity, but before they had brought it to perfection they flagged, and for want of steadiness and a little longer perseverance, lost their money, their labour, and all their prospects. At the same time he proves to a demonstration, from exact and minute calculations, the great advantages of vineyards notwithstanding the great expense the Romans were at in buildings, inclosures, workmen and magnificent works, and brings his own vineyards, which were well known as proofs of all he had said.

We shall take the liberty to conclude this introduction with a short but pleasing description of the vine, which Cicero, in his beautiful tract upon old age, puts into the mouth of Cato:

“ The vine, that naturally runs low, and cannot rear itself without a support, is for this end provided with tendrils, by which, like so many hands, it lays hold on every thing it meets with that may raise it, and by these aids it expands and becomes so luxuriant, that to prevent its running out into useless wood, the dresser is obliged to prune off its superfluous wandering branches; after which, from the standing joints, in the ensuing spring, the little bud called the gem pushes out the new shoot whereon the tender young grape is formed; which gradually swelling by nourishment from the earth, is at first austere to the taste, but guarded with leaves around, that it may neither want due warmth, nor suffer by too scorching rays, it ripens by the sun’s enlivening beams, and acquires that delicious sweetness and beautiful form, that equally pleases both the taste and the eye; and then enriches the world with that noble liquor, the advantages of which I need not name. Yet is not the sense of these, nor of all the advantages of husbandry, that so nearly affect us, as the pleasure I find in their culture alone; such as ranging the vines and their supporting perches in exact and even rows, in arching and binding their tops, lopping off the woody and barren, and training the fruitful branches to supply every vacancy, and then contemplating the beauty and order with the process of nature in the whole.”

The first thing necessary to a good vineyard is a proper plot or piece of ground; its situation should be high and dry free from springs and a wet spongy soil; its aspect or front should be towards the south and south-east: though the ground be not a hill, yet if it be high, open and airy, and gradually ascending towards the south or south-east, it will do very well; if it be a fruitful hill, it will do better; but if it be a mountain, with a rich soil, it will be best of all, for the higher the vineyard the richer the vine.

The soil most natural to a vineyard, and such as produces the sweetest grapes, and the richest and strongest wine, is a rich mould mixed with sand: the newer and fresher the ground the better; such a soil may be found on a rising ground and on some hills, but very seldom on the sides of mountains; for here the soil is generally stiff and clayey, so ordered by Providence, as being less subject to be washed away by hard rains; but this stiff soil on the side of mountains differs greatly from clay grounds below the winds and air, and the sun’s heat, so dry and warm it, that it becomes a proper bed for

vines, and renders them both prolific and productive of the richest wines.

A rich warm soil mixed with gravel, or a sandy mould interspersed with large stones or with small loose rocks, are also very proper for a vineyard: rocks and stones, if the soil be good, warm and dry, are no disadvantage to vines; on the contrary they reflect great heat to the fruit, and thereby contribute towards perfecting the wine, especially if they are on rising ground, on the declivity of a hill, or on the side of a mountain: it is true they are attended with some inconveniencies: it is more difficult to keep such a vineyard clean, to stake it well, to range the vines in proper order and regular form, to dung the ground, and gather in the vintage. But then, these rocks and stones will make a good, close, strong and lasting fence. On the sides of hills and mountains they are absolutely necessary to make low rough walls along the lower side of the vines, to preserve the good soil from washing away. They serve also to keep the ground moist in hot dry times, when, but for them, the soil would be parched up along such steep grounds. In short, there would be no such thing as raising vineyards on such grounds, where it not for rocks and stones. For as it is necessary to keep the soil loose and mellow, it would all wash away with hard rains, if not prevented by forming a kind of rough wall of stones along the lower side of each row of vines. Again, such lands are cheap, being unfit for other purposes, generally yielding but little timber or grass. They may therefore be purchased by poor people, who could not afford to go to the price of good land. Lastly, these steep hills and mountains always yield the richest wines, the value and price of which will compensate for any extraordinary labour.

If the ground be worn and out of heart, it must be renewed and helped with dung, with fresh mould, with creek mud, with the rich soil that lodges along the sides of brooks or rivers, or that settles in low places at the foot of hills or mountains, or by foddering cattle or sheep upon it with good store of straw, salt hay, or corn stalks, &c. or by penning such cattle upon it and plowing all under it as deep as may be, till all be made sufficiently rich, or by any other method that shall best suit the owner.

If the ground is stiff, it may be mended by good store of sand, ashes, soot, the rubbish and mortar of old buildings, well pounded, especially if such mortar be made of lime and sand:

by the dust and small coal of coal kilns, and the earth that they are covered with when they are burnt, sea sand or fine gravel, and fowl's and sheep's dung, or the old dung of neat cattle.

After the ground is brought into good heart, and has been deep ploughed or dug and well harrowed, so as to be quite mellow, it should be well secured with a good close fence, sufficiently strong to prevent the intrusion of cattle and hogs, for on this depends much of the success of the whole plantation.

The next step to be taken is to provide a sufficient stock of vine cuttings, not only enough to plant the vineyard, but a small nursery too. If these cannot be had all at once, the planter should begin to lay up a year or two beforehand, and plant them in his nursery in even rows, at four inches distance, and the rows three feet asunder, that they may be hoed and kept clean; in this case he should scatter some short straw and chaff between the rows to keep the ground moist and the weeds down. The ground of the nursery should be in good heart, but by no means so rich as the soil of your vineyard; if it is, when the plants are removed into the vineyard, they will seldom flourish or become fruitful. The reason of planting the cuttings so close in the nursery, is to prevent their shooting their roots too far into the ground, which would render them very difficult to take up without damaging the root, and more tedious to plant out.

Various sorts of vines should not be planted in one vineyard, if it is meant to make good wine. The most experienced vignerons assert, that grapes of one sort make the best wine; that if they are mixed they hurt the wine, by keeping it constantly upon the fret by means of their different fermentations. Be that as it may, we should recommend this practice for reasons that operate more strongly, which are, that the more simple and pure wine is, the more perfect it is in its kind. Three different wines may be all good in kind, and very agreeable whilst distinct, but when mixed together become quite the reverse, and the whole be spoiled. If a vineyard contains one acre of ground, it should have but two sorts of grapes in it, if it is meant to make a profit of it by selling the wine; if it contains two acres we advise to have four sorts in it; and if it contains three or four acres we should not chuse more: but if it contains six, eight or ten acres, perhaps it might be proper to have a greater variety; but then preference should be given

to those kinds that make the best wines, and such as do not come in at the same time, from whence the planter would reap many advantages:—he would not be over hurried in the time of vintage, nor run the risk of having some spoil upon his hands, whilst he was making up the rest; again, if a season proved unfavourable, and some were cut off by the inclemency of the weather, others, that were later ripe, might escape the injury. It is certainly best to plant each sort in a distinct quarter by itself, to avoid confusion, and to reap every advantage.

The next thing to be considered is the quality of the vines to be made choice of. This must be limited and adapted to the climate where the vineyard is planted. The most hardy and earliest ripe will best suit the most northern States, we mean those of New-Hampshire, Massachusetts, Rhode-Island, Connecticut, &c. The vines proper for these countries are,

The black auvernat,

The blue cluster,

The black Orleans,

The miller grape.

These four make the best Burgundy.

The black Hamburg,

The melie blanc,

The red Hamburg,

The white Morillon,

The white muscadine,

The white auvernat,

The muscadella,

The grey auvernat.

All these are ripe early in September.

All the foregoing sorts will do very well for New-York, New-Jersey and Pennsylvania; we mean for the clear and open parts of these countries; to which may be added the following sorts, which are recommended for trial, they being more tender, but ripen in September; they should be planted in a warm part of the vineyard:

The chasselas blanc, called

The red frontiniac,

the royal muscadine,

The black Lisbon,

The malvois or malmsey,

The white Lisbon,

The grey frontiniac,

The chasselas noir.

All the foregoing sorts will do very well for the States of Maryland, Virginia and North-Carolina, to which are added the following, and recommended for trial, but they must have a warm place:

The white frontiniac,

The black damask,

The malmsey muscat,

The chicanti of Italy, which makes a rich wine much admired in Italy.

The claret grape of Bourdeaux,

The white Oporto,

The black Oporto.

All the before-mentioned sorts will do well in South-Carolina, and in the colonies still farther south, particularly in the rich soils of Kentucky, &c. To which may be added the following, as being still more tender and later ripe :

The raisin muscat,	The white muscat of Alexandria
The Alicant and Malaga raisin-grape,	The gros noir of Spain,
The red muscat of Alexandria,	The St. Peter's grape.

In many parts of Virginia, North and South-Carolina, and in Georgia, what strength nature afforded the soil has been exhausted by tobacco, Indian corn, rice, &c. However, those grounds that lie near to rivers and creeks, may easily be recruited; for these rivers abounded with rich mud, which is the best kind of manure for such lands, and it would be no great expense to procure a sufficient quantity of it to cover a piece of ground large enough for a vineyard, especially as it may be done at such times when other business is not very urgent: this mud must lie some time upon the ground before it is mixed with the soil, at least a summer and a winter; for at first it will bake very hard, and be very crude; but the winds, dews, rains and frosts, with the help of the sun, will sweeten, mellow, and bring it into a proper order; then it must be equally spread and well mixed with the soil. Thus may the land be recruited, and kept in good heart, from time to time, and from a barren useless piece of ground, it may become profitable both to the owner and his country.

The nature and quality of the vines being considered and made choice of to suit the country, the next thing necessary is, to make choice of such parts of a vine, for cuttings to plant, as may be most likely to grow and flourish, and also to produce healthy and fruitful vines, on which the success and profits of a vineyard very much depend. All parts of a vine are not equally good and fit for plants; all branches that have not borne fruit, all suckers, lateral and secondary branches, and especially the long running barren branches, should be avoided; these different sorts seldom produce fruitful vines; the cuttings should be chosen from the teeming part of the vine, from among those branches that were set apart for bearing fruit; and among these such as are short-jointed, and have been most fruitful the last summer: they should be cut down close to the old wood, for there the wood is ripest and most firm. The upper part of the same branch is less ripe, more loose and spongy, more apt to fail, and very seldom makes so firm and lasting a vine. Howe-

ver, where vines are scarce, and men have not these advantages of choice, they must do the best they can. These branches must be trimmed and cleared from the lateral or secondary branches; but in doing this, great care must be taken not to wound the buds or eyes, which a careless hand is very apt to do. If the bud be bruised with the back of the knife, so that the cotton that lies under the thin bark that covers the bud, and is wisely intended to preserve it from the injuries of the weather, be rubbed off, the bud will perish. Therefore, as the buds lie close to these lateral branches, and are in so much danger of being wounded, it is best and safest to cut the branches off a little above the height of the bud.

These branches thus trimmed should remain whole and at full length till the next April, which, in the northern States, is the best time for planting. They should be separated from the plant some time in September, or as soon as the vintage is over, that being the best time for the trimming of vines, because the wounds which the vine receives are healed up, and securely closed from the severity of the winter season. If this work is left till February or March, the vine suffers by the fresh wounds in long rains, fleets and frosts that follow; or if the weather is favourable, it grows faint and is exhausted by excess of bleeding.

The best way for preserving the cuttings through the winter, and which we therefore recommend for a general practice, is as follows: At or near the north-west corner of the vineyard or garden, the fence being good and close, a small trench should be dug five or six inches deep and wide, and sufficiently long to contain all the branches. In this they should be planted thick and close with the butt ends down, and the trench filled up with the earth that came out of it, pressed down well with the hand all about the bottom of the branches; the earth should rise two or three inches above the surface of the ground, to prevent the water from settling about the vines, which would rot them. If the cuttings are of various sorts the planter should be careful to distinguish them from each other by their proper names. Before the planting of the vines in this manner, two or more crotches, according to the quantity of vines, should be driven down at about three feet from the trench, and parallel with it, upon which poles should be laid to support the upper part of the branches about twelve or fifteen inches from the ground; thus they will lie sloping without touching the ground, which preserves them from growing mouldy and from rotting.

The vines then should be covered with straw, laid lengthways upon them up and down a little beyond the trench, so that the water is carried off beyond the foot of the vines by this straw roof; and yet the straw must not be laid on too thick, lest it continue moist too long and occasion mouldiness. Across the top and bottom, poles should be laid, and fastened down to prevent the straw from blowing away. Thus they should remain till spring.

In the beginning of April, when ready for planting, the weather being moderate and calm, the frost out of the ground, and nature teeming with fresh vegetation, then the branches should be cut for planting. If one cutting from every branch is sufficient for the purpose, then the lower part should be cut about twelve or fourteen inches long. But as it is most likely that the planter will not have enough of these, he must make two or three cuttings of every branch, not less than a foot long; and having a trench made ready, place them in it close together, the butt or lower end down, and cover them up with earth to the upper eye, till he is ready to plant, carefully placing every sort by themselves, with a label denoting the kind. This direction is calculated for New-York, New-Jersey, and Pennsylvania. The more northern States will be a month later, and the more southern colonies will be at least a month, some two months earlier; planters must therefore conduct themselves accordingly. In these last States, we would recommend the cuttings to be longer, that they may be planted deeper, the better to preserve the vines from excessive heats and droughts.

The ground being well manured, and brought into good heart if old, or being naturally rich if new, and having been, at least twice, deep ploughed and well harrowed the summer before, in the fall of the year it should be deep ploughed the third time, across the hill or rising ground, and lie rough just as it is ploughed all winter, which will greatly prevent washing, and the frosts will mellow it and prepare it the better for vegetation.

In the spring of the year, as soon as the ground is dry, it should be well harrowed both ways, and with a sharp iron tooth harrow laid down smooth and even; and this general caution should be attended to, never to meddle with the ground of the vineyard when it is wet, or even moist at top, nay, the planter should avoid as much as possible walking in at such a time. His own experience will soon teach him the reason of this caution; for he will find, that the lighter and more open

and loose the soil of a vineyard is kept, the more his vines will flourish, and the more fruitful they will prove.

When the ground is in proper order, the planter should provide a small stake of four feet long for every vine, and begin to lay out his vineyard in the most regular manner the nature and shape of the ground will admit of. If he means to plough and harrow his vineyard with a small single horse plough and a small corn harrow, he should leave a border of ten or twelve feet on each side of every square to turn the horse upon, lest he tramples upon and destroys the outside vines. There will be no need of such borders along the upper or lower side of the squares, unless he chuse it for the sake of regularity; because the vineyard should never be ploughed up and down hill, but transversely, for if it is it will be gullied, and the rich soil washed away by hard rains.

The following method of laying out a vineyard, we think, is as easy, as regular and as expeditious as any, for a long square or a four-square piece of ground: Lay it out in as many squares, at least, as there are different kinds of grapes to be planted: the squares being laid out, plant the young vines in regular order, at about eight feet distance from each other. This we think the best distance for them to stand, but variations may be made according to the will of the planter.

If the vineyard is large enough to divide into four, six or eight squares, or more, according to the different sorts of grapes designed to be planted in it, and not straitened for room, the planter will find it very convenient, on many occasions, to have cross walks of twelve feet between the squares, not only to turn upon when ploughing, but for carting in of manure, and placing it conveniently for dunging the vines, which will be a saving of labour, besides being attended with many other advantages.

The ground being prepared, and having as many vine cuttings as can be planted in half a day, soaking in rich dung water, in a pail, which serves best to keep the plants upright, the butt ends being down, holes must be dug at proper distances larger or smaller, according to fancy or judgement; for it matters not so they are deep enough to contain the plant. And here we wish to clear up a point, which has led many people into mistakes and rendered this work exceedingly tedious, that is, the throwing into the holes, in which the vines are planted, rich mould mixed with old dung, thinking that this must be a great advantage to the vine: this is a mistaken notion, for as soon as its roots strike beyond this rich mixture, into the common soil, which is many degrees poorer and colder, the consequence is, the roots recoil and shrink back at coldness and poverty they had not been used to, and the vegetation is stopped, and the

plant degenerates and becomes barren ; and if the plant is examined at bottom, it will be found, that instead of extending its roots to their usual length, it has shot out a great number of small fibres like threads, which extend no farther than the good mould ; and these being quite insufficient to answer the demands of nature, the plant perishes, or remains in an inactive and barren state. Whereas, had the vine been planted in the common soil at first, it would have met with no alteration, no sudden change to check its growth. This is sufficient proof, that the soil should be well mixed and good, for the vine prospers in a warm, fruitful soil, but proves unfruitful and perishes in a soil cold and barren : yet a soil may be too rich, or made too rank by manure, and this extreme should also be avoided. But to return to planting the vines ; the holes being dug according to the mind of the planter, a stake should be driven on one side of the hole, and the vine then planted with the foot set forward from the stake, and bent a little, so as to bring it gently up against it, but one eye only should remain above the surface of the ground : the bud or eye must not touch the stake, but look from it : the earth, mixed well together, should be pressed gently about the vine, till the hole is almost full, and the rest thrown in lightly without pressing, so that it may rise up to the eye of the vine, which ought to be about two inches above the common surface. By this means the vine will be preserved from drying winds and the hot sun till it begins to grow. Some place four or five paving stones about the foot of the vine, not so close but that the roots may shoot out between them, and these they say, and we think with reason, condense the air in hot dry seasons, and nourish the vine with moisture, and cool and refresh it when parched with excessive heats. In the northern colonies, the vines should be planted on the south side of the stakes for the sake of the sun : in the southern colonies, they should be planted on the north side, to avoid too great heat. The upper eye only should shoot out branches, from which the head of the vine is formed. If any shoots should rise from below, which sometimes is the case, the sooner they are removed the better ; these are called suckers, and very much exhaust the vine.

When the vineyard is planted, if there are any cuttings remaining, they should be planted in a nursery, or along the north side of the stakes, for there will be occasion for them, as many of the vines will fail, and the sooner their places are supplied the better. If some of the vines do not shoot till July, they should not be given up, as they may grow notwithstanding ; many have not shot till August, and yet have done well. Filling up all the vacancies, where the vines have failed or miscarried, is absolutely necessary to be done as soon as possible, either

the fall after the vines were planted, with plants from the nursery, if the planter has any growing; or the next spring, with cuttings, which is the best season for planting them; for having no root, they suffer greatly in the winter season, and if planted in the fall, most of them perish. If the vacancies should by any means be neglected for three or four years, the planter will find it very difficult to raise thrifty and flourishing vines in such places afterwards; because, by this time, the neighbouring vines having shot their roots all round the spot where the young vine is to be planted, will so draw away the nourishment, and entangle the small tender roots that first shoot from it, that it will not be able to shoot forward and flourish. Some, for this reason, plant two cuttings in a hole, lest one should miscarry. To this the chief objection is, that hereby the regularity and uniformity of the vineyard is hurt, many of the vines standing out of the line. For in a well-regulated vineyard the vines should be always arranged in regular rows. If some of the vines prove weak the first summer, and do not recover strength the second, though manured and cultivated well, they should be rooted out, (for in such case they very seldom are worth raising) and healthy vines planted in their stead out of the nursery.

In digging up the plants from the nursery, care should be used that they may be taken up without wounding or bruising the roots, and having a pail or small tub half full of rich dung water, the plants should be put with the roots downward into that, to preserve them from the sun and drying winds, which would soon parch and dry up these young tender roots and kill the vine. When the planter has dug up about a dozen or twenty plants, he should then proceed to planting, which must be done in the following manner. The holes being dug deep enough and sufficiently wide for the roots to be spread in at full length, some loose earth should be thrown in, and spread over the bottom of the hole. The plant should then be fixed near the stake, so high that the little branches may rise an inch or two above the surface of the ground. The roots, it will be perceived, for the most part grow in rows, one above another. The upper roots of all, which are called the day roots, must be cut away; the under roots of all must then be spread at full length, and covered with earth, then the next must be served in the same manner, and so on till all be regularly extended and covered. This is pursuing nature, which is generally the best director. The earth also by this means will better settle about the roots, and the vines in the spring will grow and flourish as if they had not been moved or transplanted.

The vines being all planted as above directed, and the vine cuttings, with one bud only above ground, and that almost co.

vered with light earth, to preserve them from suffering from heat and drying winds till they begin to grow ; this upper bud only will shoot out branches, and the lower ones will throw out roots : and this is much better than having two or three buds above ground, and branches growing from them all, which only serve to weaken the vine, and hinder the forming of a good head, which is the first and chief point to be well secured.

We now proceed to the management of the vine in its infant state, upon which will very much depend the after success of the vineyard.

There are but two ways of forming and managing of vines to advantage for vineyards, by stakes or espaliers. As for wall fruit, the vines that are fixed to walls must be managed in the same manner as those which are designed for espaliers, that is, the head of the vine is at first formed about three feet from the ground. But this we shall particularly explain when treating of the management of vines for espaliers ; we shall begin with the proper culture of vines that are designed for stakes.

In this case, the head of the vine is formed near the surface of the ground : this method is now generally practised throughout wine countries, and indeed it is the only method proper for countries where the frosts in winter are so hard as to hurt vines, by which means the next year's crop is destroyed. There is no way to prevent this but by covering the vines in winter, which cannot be done when fixed upon frames or espaliers without great difficulty and labour, as well as danger to the vine.

The first summer after the vine is planted, there is nothing to do, but to tie up the little branches to the stakes with a soft band, as soon as they are grown about a foot or fifteen inches long, which will save them from being torn off by hard winds, which would endanger the vine ; besides, they grow the stronger and the better for it, and are out of the way of the hoe, the plough and the harrow. The ground should be kept clean and free from weeds and grass, for they are great enemies to vines, and if the ground is kept mellow and loose, the vines will grow and flourish the better. If the planter has any litter, short straw and chaff, the shives of broken hemp or flax, the chaff of flax seed, the dust and chaff of buckwheat, and the straw trod fine with horses when it is dry, any or all of these spread over the vineyards after it is hoed or ploughed and harrowed, will keep down the grass and weeds, keep the ground moist and light, and greatly preserve the good soil from washing away. If this is done the first three or four years, it will greatly forward the vines, bring the ground into good heart,

and finely prepare it to produce good crops, by keeping it loose, airy and light.

In the month of September, when the leaf begins to wither and fall off, which is the best time for trimming of vines, the planter should cut down all the branches to one good bud each, and remembering, that the lowermost bud next the old wood is called the dead eye, and never reckoned among the good buds. When the vines are thus trimmed, a careful hand should take away the dirt from the foot of the vine, about four inches down, and cut away all the upper roots that appear above that depth. These should be taken away every fall for the first three years. The best way is, not to cut them off close to the body of the vine, but about a straw's breadth from it, as they will not be so apt to grow again as when cut close. These upper or day roots greatly weaken the vine, and hinder the lower roots from extending and firmly fixing themselves below, on which greatly depends the strength, firmness and durableness, of the vine, and also its fruitfulness. Besides, by the roots running deep, the vine is preserved from perishing in long, tedious droughts. The foot of the vine should be left open after the day roots are cut away, that it may dry and harden, till the hard frosts come : then the holes should be filled again, and the head of the vine covered with chaff and short straw mixed, or with bog or salt hay, or with horse litter that is free from dung and grass seeds; for these should be carefully kept out of a vineyard, which will save the labour of rooting out the grass that would spring from them. Some cover the head of the vine with earth when they fill up the holes ; but this is wrong, as it greatly endangers the vine, the ground, in warm rains, moulding and rotting the vine. For the same reason, the planter should suffer no dung to be among the straw, hay or horse litter, with which he covers his vines, as the heat of the dung, in warm rains or muggy warm weather, will mould and rot them ; the cooler and drier they are kept, the better. When the planter trims his vines, if he finds that any of them have failed, which is very common, he should plant others in their room immediately, if he has any plants of the same sort growing in his nursery ; if not, he should without delay, provide cuttings of the same kind, and preserve them till spring, as before directed, and plant them in the vacant places, that the vineyard may be full and complete as soon as possible.

The second summer the planter will find more branches shooting from the heads of his vines than did the first summer ; and here the skill of a vigneron is necessary for forming the head in the best manner. The best method is to let the shoots grow till they are ten or twelve inches long, then to chuse eight that are short-jointed and much of a size that grow on all sides of the vine, and strike off all the rest. If one branch among the whole

number appears much more thrifty than the rest, the planter may perhaps be tempted to save it; but in this case his eye should not spare, for it will draw to itself the chief nourishment of the vine, and destroy, or at least much weaken the rest of the branches, and after all will bear but little fruit, for the short-jointed branches prove the best bearers, and these standing on all sides of the head, preserve the vine in full strength and vigour. For this reason, the rounder the head of the vine is formed, the better: if the branches are suffered to grow only from one side of the head, the other side suffers greatly, and is apt to perish.

This year there should be two stakes to a vine, one on each side, to which the branches should be fastened; by this means they are spread at a distance from each other, and grow the stronger; the sun, air and winds, come to every part, the wood ripens well, the buds fill, and they are the better prepared to become fruitful in due time: whereas, when they are huddled all together, and fastened up to one stake, they suffer greatly for want of the sun and air to dry them, after rains, mists and heavy dews; and in close, damp weather, they often mildew and rot. Another reason for tying up the branches singly to the stakes on each side, as soon as they are long enough, is to prevent them from being torn off by hard winds, which would ruin the vines. The vineyard should always be kept clean and free from weeds and grails; and the dryer the ground is, and the hotter the weather, the more effectually they are destroyed, by hoeing, ploughing and harrowing. But the planter should remember, never to meddle with his ground when it is wet, for in such case he does more hurt than good.

This second summer the main branches should be suffered to grow about five feet long, and then the ends of them be nipped off, in order to keep them within proper bounds, and to hinder them from growing wild. The lateral or secondary branches should be nipped off at the end when they are about a foot long, the nephews also should be nipped off when they are about six inches long. This is much better than the taking all these smaller branches clean away, which is the practice of some; for when these are taken clean away, the main branches evidently suffer, they grow flat, and appear distorted; which plainly shews, that nature is deprived of something that is essentially necessary to her well being. It is quite necessary to nip off the ends of the main branches, when they are grown about five feet long, as they grow the larger and stronger, the wood ripens the better, the lower buds are better filled and prepared for bearing fruit. Besides, the vines become habituated to a low, humble state, and their tendency to climb and mount up above every thing that is near them is checked, by which means they

bear fruit within reach. Some time after the tops of the main branches are nipped off, they will shoot out a second time, and then they generally throw out, from near the end, two branches instead of one; these must be nipped off; at the same time the lateral or secondary branches must be looked to and nipped, if any of them are shooting out again.

In the fall of the year, as soon as the leaf begins to wither and fall off, which happens earlier or later, according to the weather, the branches should be again cut down to one good bud each, the earth taken away round the heads of the vines, as before directed, the day roots cut off, and the vine managed just in the same manner as in the fall before. As some of the forward vines will bear fruit the third year from planting, and as it is natural for the planter to desire fruit, and especially to know what sort, and how good, the different vines will bear, to satisfy his curiosity, we would advise him to set aside two or three of each sort of his most thriving vines for that purpose, and instead of cutting down all their branches to one bud each, like the rest, leave two branches on each of these vines, with two or three good buds on each, which will shew some fruit for the satisfaction of his curiosity. But we would persuade him to prevent the rest from bearing fruit till the fourth year, and the weaker vines till the fifth, for the vineyard will make him ample satisfaction for this piece of self-denial, as it greatly weakens a vine, and indeed any other fruit tree, to bear when so young; and however fond most men may be of their vines bearing much fruit, the overbearing of vines is allowed, on all hands, to hurt them greatly. To prevent which, in wine countries, where it is common to lease out vineyards to husbandmen, whom they call vigneron, they have very strict laws, obliging them to leave only four, six, or eight bearing branches on a vine, according to the age of the vineyard, the strength of the vines, the goodness of the soil, and the custom of different countries where good wines are held in repute, to prevent their hurting the vines, and the reputation of their produce. These vigneron are likewise obliged, after three fruitful years, if so many happen successively, to let their vineyards rest one year without bearing fruit, that they may have time to recruit and gather fresh strength.

The third summer the planter should manage his vines in the same manner he did the second, tying up all the branches to the stakes, one above another; only of those vines that are to bear fruit, the fruit-bearing branches should be tied up above the rest, that the fruit may have the benefit of the sun, the air and warmth, all which are necessary to bring the fruit to maturity. This year a sun stake should be provided, which should be

drove down in the spring, just on the north side of the vine, upon a line with the rest. To this stake the branches that bear fruit, there being but few of them, will be best fastened, because there will be the more room for the branches of reserve, which are to bear fruit the next year, to be distinctly fastened to the side stakes. These branches of reserve are now of great importance to the owner, as the next crop will depend upon the right management of them. They should, therefore, be carefully tied up at proper distances to the side stakes, that they may grow well, that the wood may ripen, and the buds may be well filled. When they are grown above five feet long, the ends must be nipped off, and the lateral branches kept short, and the nephews restrained, if they grow too long. As to the few vines that bear fruit this summer, the fruit-bearing branches should be nipped off five joints above the fruit, and the side branches and nephews kept short, as above directed.

In the fall of this third summer, two of the best short-jointed branches of reserve should be saved, one on each side of the head of the vine, for bearing fruit the next year: the rest should be cut down to one good bud each. If some of the vines be very strong and flourishing, the planter may preserve four branches for bearing fruit, but by no means more, one on each quarter of the vine. As to the branches on the few vines that bore fruit this year, they must be cut down to one good bud each; for the same branch should never be suffered to bear fruit two following years, unless the trees fall short of branches of reserve, in that case the planter must do what necessity requires, and let the old branches bear a second time, but they seldom or never bear large clusters, nor fair fruit. Those vines that bore fruit this year, should not have above two branches on each left for bearing fruit the next year, by which means their strength will be preserved from being exhausted when young; in consequence of which they will last the longer, and bear fruit the more plentifully. The rest of the management is the same with that of the last year; except that some time in the latter end of November, or somewhat later, if the hard weather keeps off, a small long trench on each side of the vine should be dug with a hoe, and the branches that are kept for bearing fruit, laid down gently into them, and covered over with the earth. The part which appears above ground must be well covered with straw, bog, or salt hay; and, indeed, if the whole that is buried were also covered in the same manner, with straw, &c. it would be

best; for the branches being of an elastic nature, they are very apt, upon the thawing of the ground, to rise with their backs above the ground, and remain exposed to the weather, by which means the crop is often lost, which a small covering of straw or hay will prevent. If any of them should be too stiff to bend down, then straw should be bound round them and the stake.

In the spring of the fourth year, the branches that have been preserved for bearing fruit, should be carefully trained up to the side stakes, the higher the better; the branches that shoot out from the head this spring, which are called branches of reserve, and are designed to bear fruit the next succeeding year, should be tied up to the stakes below the fruit-bearing branches, and one or two to the middle stake, if there is room, for oftentimes the fruit-bearing branches occupy the middle as well as the side stakes, and especially in a plentiful year. The management of the vine in its bearing state calls for a close and particular attention. Some gentlemen, and those who have written best upon this subject, recommend the taking away all the lateral or secondary branches and the nephews, close to the body of the fruit-bearing branch, and to leave only the main leaves of that branch, thinking, by this method, that all the nourishment of the vine is thrown into the fruit. They also order the top of the branch to be taken off within three joints of the uppermost cluster of grapes. Others again are for following nature, and suffering all the branches to extend themselves as they will. These we look upon as two extremes, and think that a middle way is the best, most rational and safest. The lateral branches, the leaves and nephews, are supposed by naturalists to draw off the crude and thin juices, and to hinder them from entering and spoiling the fruit, and also serve for the circulation of the air through all the parts which is necessary to vegetation, and for bringing the fruit to perfect maturity. That this is so, or how it is, we are not so well acquainted with the operations of nature as to determine; but this we know, that when these smaller branches are taken clean away, the main branches, instead of growing round, full and plump, which is their natural state, become hard, flat, and distorted, and have an unnatural appearance. Besides these branches, when kept within proper bounds, serve to shade the fruit from the scorching rays of the sun, and to screen them from violent winds, from hail and beating rains, from damps and fogs and cold night dews, which are all injurious to the fruit, as well as the cold dry north-east winds, and the cold driving north-east storms. But this should not lead

into the other extreme, for if the vine is left to itself, and all these branches suffered to grow, it will run wild and ruin itself by its own excess. This is the method of managing vines when the head is formed near the ground, and which is now practised in most vine countries in vineyards, except some parts of France, where they are still fond of espaliers, and this method must be continued as long as the vines last, which most writers affirm, will be above one hundred years. As to the management of vines in gardens, against walls, and for forming of shady places, and many other ways to please the humour and fancy of the owner, that is not to be regarded, it has no relation to vineyards, though the leading observations respecting cutting, &c. will equally apply to them.

We have been informed that it is the practice of some to cut all the branches down, and to trust to new shoots for bearing of fruit; and we have read the same account in a treatise published by James Mortimer, Esq. fellow of the royal society, in the year 1707, but these accounts are so vague, so general and superficial, without entering minutely into any particulars, that no dependence can be placed upon them; nor can any man from the account form a judgment of the manner of doing it. However, from thence we have taken a hint, and propose a method which may be worth trial. In the fall of the third year of the vine's age, instead of saving two or four branches for bearing fruit, cut down these to two buds each, and the rest cut down to one bud each; the upper buds of these branches that have two, are designed to bear fruit the next year, the lower buds and the buds of all the rest are designed for fruit the year after, and therefore if any fruit should appear upon them, it should be taken away as soon as the cluster appears; in the fall of the fourth year, all the branches that have borne fruit should be cut clean away, and those only left that did not bear fruit; and then according to the strength of the vine, as many of these may be cut down to two buds, as in judgment it is thought the vine ought to bear, the rest should be cut down to one, always remembering that the branches that have but one bud, and the under bud of those that have two, are to bear no fruit. When the vines come to be strong and able to bear it, all the branches should be cut down to two buds, and then there will be eight bearing branches in one year, which are quite enough for the strongest vines; however, if the planter has a mind to strain his vines, and to try how much they will bear, he may cut as many branches as he thinks fit down to three buds, two of

which may bear fruit, while the under buds are kept for branches of reserve. In the fall, all the fruit bearing branches should be cut clean away, for no branch should be left to bear for two years. If this method should succeed, and the planter think it preferable to the method first laid down, we mean that of preserving branches of reserve to be laid down and covered in winter, which is the German method, and the general practice of the Rhine, &c. then, in order to bring the older vines into this method, he should cut down the fruit-bearing branches to one bud the first year, and the branches of reserve to two or three buds each, as the vines appear able to bear it. In this the planter must form his judgement from the strength of the vine, the goodness of the soil, the distance of the vines from each other, and the quantity of fruit they have borne the three preceding years: for vines must have time to rest and recruit, if they are meant to last, and to bear again with vigour.

For the covering of these vines in the winter season, we would advise a handful of soft hay, that is free from grass-seeds, to be laid on the head of the vine, and a slight box made of rough cedar boards, or of pine, be put over the head, which will be a safe and sufficient covering: otherwise a small sheaf of straw, bound well round the stake, and the bottom brought all round the head of the vine, and secured by a band from blowing open, will do very well. The vines should not be covered till hard weather is ready to set in, and they should be dry when covered.

Before we proceed to the management of vines for the frame or espalier, it may be necessary to offer a few observations of a general nature, which all who grow vines will find it their interest to attend to.

When vines are trimmed in the fall, which they ought to be, as soon as the vintage is over, or as soon as the leaf withers and falls off, they seldom bleed, and never so as to hurt them. If vines have been neglected and not trimmed in the fall, and this work must be done in the spring, it should be done in February, if good weather happens, or early in March. If it is done later, they will bleed too much, and endanger the crop. Searing the wound as soon as it is made with a hot iron, it is said, and we think with reason, will prevent the bleeding. In trimming, keep about two inches from the bud, or half way between bud and bud, that the upper bud that is left may be free from danger. The rule is, to cut sloping upward, on the opposite side to the bud, but this is no kind of security to the eyes below,

If, therefore, fearing every wound with a hot iron be thought too much trouble, another remedy is, to wash the branches that are wounded and bleed, and especially the buds, with a rag dipped in warm water, without touching the wound, which in eight or ten days will stop of itself; the liquor forming a stiff jelly upon the wound, like coagulated blood, and drying by degrees, heals up the wound. The washing must be deferred till they have done bleeding: unless this is done, the buds will be endangered. For so glutinous is the sap, that it binds up the bud it reaches, that the leaves cannot open and unfold at the time of vegetation. In cutting off large limbs from old vines, it sometimes happens that ants fall upon the pith, eat their way in, and make a hollow, where the water settles and rots it. In this case the remedy is, to cut such branches close down to where it is solid and green, and it will bark over and heal.

It is common for large buds to shoot out two or three branches each, but only one on each should be suffered to grow; if fruit is expected on them, the planter should be careful not to strike them off till he knows which is most fruitful. Vines that are close planted in a vineyard, cannot be expected to bear so much fruit as single vines, or as those that are planted at a distance. Their roots are too much confined, so that they cannot gather nourishment in so small a compass of ground, to support and bring to perfection a large quantity of fruit; and this is a sufficient reason for restraining them, and for limiting the number of bearing branches, if it is meant to make good wine, to keep the vines in full vigour, and to preserve them for many years; but the deficiency is fully made up by a greater number of vines, and the planting them close, enables the planter the better to keep them low.

Vines that bear black or red grapes generally shoot forth a greater number of branches, and more vigorous, than those that bear white grapes, and therefore the latter require more caution in trimming, and more care in the cultivation and management of the soil, that it be kept clean and in good heart.

When vines have been covered with earth during the winter season, they should not be uncovered in the spring, till the hard frosts are over, and then it should be done in a fair, warm day, that they may dry before night, for if they should freeze before they are dry, it would greatly hurt, if not ruin the crop.

In transplanting vines or trees of any kind, it has by long experience been found, that removing them in the fall, after the leaf is fallen, is much surer and safer than doing it in the spring;

for if trees are well staked, so as to stand firm against hard winds, the ground will be so well packed about the roots, that they will grow in the spring as if they had not been removed, and are in no danger, if a dry season should happen (especially if some horse litter or old hay be thrown round them in the spring, so as not to touch the stem.) Whereas if they are removed in the spring, and a drought succeeds, before the ground is well settled about the roots, many of them will miscarry.

As vines are best planted upon rising grounds to prevent too much wet, and as it is necessary to keep the soil loose and mellow, it thereby becomes more liable to be washed away by hard rains, which is a great injury to a vineyard; now if by any means this inconveniency can be avoided, it is a great point gained, and therefore it deserves the particular attention of the planter: several ways have been tried, so as neither to injure the vines nor hurt the crop. The following method, where a person has the conveniency, will, we believe, be found effectual. Lay broad flat stones, not exceeding two inches in thickness, close along the lower side of the vines, after the ground has been made loose and mellow. These stones being broad, and not very heavy, do not press hard upon the roots of the vines, nor pack the ground too close. They reflect great heat on the vine and fruit, which helps to bring to maturity; they preserve the soil from washing away, they keep the ground moist in the driest times, and hinder too much wet from penetrating down to the roots near the head of the vine, which chiefly occasions the bursting of the grapes when they are near ripe, after a shower of rain. To prevent this evil is one reason for cutting away the day roots, which extend themselves along near the surface of the ground. But where such flat stones are not easy to be had, we would recommend short straw mixed with chaff, the sleeves of flax and hemp, the chaff of flax seed, or old half-rotted salt, or bog hay, free from grais seeds, spread thin between the rows. On the side of steep grounds, of hills and mountains, stones in proportion to the descent, or logs of wood, where stones are not to be had, must be laid along the lower side of the vines, to keep the soil from washing away, which otherwise it will do, to the great damage, if not the ruin of the vineyard, and therefore in beginning a vineyard, in such a situation, this is an essential part of the cost.

A vineyard will thrive the better, and the crops will be more sure, if it is well screened by a good fence, buildings, mountain, or thick copse of wood at a small distance, from those points

that lie north-east and north ; the winds from those quarters, in the spring of the year, being very unfriendly to vines. But then a vineyard should be quite open to all the other points of the compass ; for vines succeed best in an open, clear, pure, warm air, free from cold damps, fogs, mists, and condensed air, arising from bogs, swamps, and wet clay grounds, and from large tracts of neighbouring woods. The north-west winds in America, are, indeed, rather advantageous to a vineyard ; for although they are extremely cold in winter, and occasion severe frosts, yet as the vines are then covered, they do them no harm. Besides, those winds are generally drying, and seldom bring wet ; in the spring and summer they are always cool, and help to brace up, harden, and confirm the leaves and tender new shot branches of all trees and vegetables, which otherwise would remain languid and weak.

There are three seasons when a careful and experienced vigneron should deny access to his vineyard ; first, when the ground is wet, because then the weight of a man presses down and packs the earth too close and hard upon the roots of the vines. Secondly, when the vines are in blossom, because if they are then disturbed by handling, shaking, or rubbing against them, the farina or fine dust that is formed on the blossom, which impregnates or gives life to the fruit, is shaken off and the fruit miscarries. Thirdly, when the fruit grows ripe, because the temptation is too strong to withstand, and persons will pluck off the fairest, ripest grapes, which injures the whole bunch, and certainly is a great injury to the owner, for the fairest grapes make the richest and finest flavoured wines.

With respect to the management of vines upon espaliers, it must be remembered, that this is a practice only fit for southern or very warm climates, where the winter frosts are not so severe as in more northern regions ; for as they are to stand exposed to all weathers, the germ or bud, from which the grapes spring, are apt to be chilled and destroyed by the severity of a sharp season, and especially by moist sticking snows freezing hard on the branches.

The first year the young vines are trimmed and managed in the same manner as before directed.

The second year, when they always shoot forth a greater number of branches, is the time for making choice of the best branches for standards ; the planter should therefore set apart two of the best shortjointed branches on each vine for that purpose, that one may be secured in case the other should fail, as these branches when young are subject to many accidents.

Having chosen two branches for standards, he should train them up as straight as possible, one on each side of the stake, to which, when they are grown about fifteen inches long, they should be bound with a soft band: as they grow longer, they should be bound a second and third time; and when they are grown up to the top of the stake, which should be five feet high, the ends should be nipped off that they may grow thicker and stronger. When the planter has taken away the tops of the vine, it will shoot out two branches at the top instead of one; these must also be nipped off and kept short, but none of the lateral branches must be taken away till the time for trimming them. In the fall, when the vine leaves begin to wither and fall, one of these standards from each vine should be cut away close to the stock, leaving the other, which will be out of danger; all the branches and nephews must be trimmed from it, and the top cut off within three feet and an half of the ground, leaving four buds at the top, and cutting off all the ends of the buds below them; all these wounds will be healed before the hard weather comes on; the two upper buds will be the arms of the vine, the two lower buds will be the two shoulders, and just under these the vine is fastened to the espaliers, and is called the head of the vine.

The third summer the espaliers being regularly set up six feet high, in a line with the vines, the posts being of some lasting wood, as red cedar, locust, or mulberry, which are ultimately the cheapest; or for want of these, of good thrifty chestnut, that is not worm-eaten; and being firmly fixed in the ground, in the middle space between vine and vine, the rails, four in height, must be well nailed to them, and placed on the north side of the vines, the lowermost about three feet from the ground, or just beneath the lowermost bud on the vine, the vine must be fastened with a strong band to a stake firmly fixed down near the root of the vine, and fastened to the frame near the lower rail, the four buds rising above it. When these buds shoot forth their branches, they must be regularly trained up to the rails above, and fastened to them with a soft band; as soon as they are long enough to reach the first above them, they must be fastened to that, and so to the next, &c. as they grow, and this must be done by a careful hand, because these branches at first are very tender; if they should be neglected till they are grown longer before they are tied, they will be in great danger of being torn off by hard winds, which will greatly damage the vine. When the branches are grown up to the top of the

frame, the ends must be nipped off even with it, and when from the tops they shoot forth again, they must again be taken off and kept down even with the frame. The lateral branches and nephews also must be kept within proper bounds, and not suffered to grow too long, for some of their side branches will steal away to a great length, and rob the vine of its strength. If any fruit should appear this year, which may happen, it should be taken away as soon as it appears, and self-denial will be amply rewarded the succeeding year.

In the fall of this third year, the lateral branches and nephews must be carefully cut away from the main branches, so as not to hurt or rub against the lower buds with the back of the knife, which is frequently done by cutting off the branches too near the germ or bud. For if the thin bark that covers the bud be rubbed off, under which is a soft warm covering of a kind of cotton, to preserve it from cold, the wet gets in, freezes and destroys the germ. The four main branches that sprung from the four buds, should now be cut down to two good buds each; besides the lower bud next the old wood, which is never looked upon as a good bud, though the planter will be obliged sometimes to make use of it. In cutting off the main branches, care should be taken to cut slanting upward, so that the wound appears in the shape of the nail of a man's finger, and the slope should be on the opposite side of the bud, that if it should bleed it may drop free of the bud; this is the rule on which we have given our opinion before. In cutting, care should be taken not to approach too near the bud that is left, lest you endanger it, by letting in the cold air and wet upon it, before the wound can heal.

The chief point in managing these vines, is, the providing branches of reserve for recruiting the arms in such manner as to confine the vine within the compass of the frame, for if new arms are raised from the old ones, the vine will soon outshoot the frame. The planter must, therefore, seek for new arms from the shoulders; if a branch grows in a proper place, any where between the arms and the head, and happens to be broken, it should be cut down to two or three good buds, as soon as it is discovered: this is called a keeper, and very well supplies the place of a branch of reserve.

We above directed to cut the four main branches that grew from the four buds, down to two good buds each, but this is designed for the strong vines only; those that are weak, must be cut down to one good bud each branch, by which means

they will gather strength the better, and if any fruit should appear on the weak vines in the fourth, or even the fifth year, it should be struck off as soon as it appears.

The fourth year, when the vines are trimmed in the fall, the arms may be cut down to one good bud each, instead of being taken clean away, for the vines being yet young and low, these two buds will in a manner become part of the shoulders, being so near them; these will bear fruit the next, which is the fifth year, and then the two lower buds that grew on the branches which sprung from the shoulder may be saved for branches of reserve, by taking away the fruit as soon as they appear, and these will bear fruit the year after, which is quite sufficient.

The sixth year the planter may have three good buds on each branch for bearing fruit, and the seventh year he may have four buds on each branch, which will make eight bearing branches, which, as before observed, are thought by the best judges to be quite sufficient for the strongest vines, if it is meant to make good wine; and to this number vignerons are generally confined.

Vines that are designed for espaliers must be planted further asunder than those that are intended for stakes, for as they rise much higher with the stem, they require more nourishment, and more room to extend their roots; ten feet is by no means too much: twelve would be better.

One general rule is necessary to be laid down in order to give young vine-dressers a clear idea of the nature and manner of trimming vines, which is a process to young beginners; the young wood that grew this year, must be preserved for bearing fruit the next year, and those branches that did not bear fruit are better for the purpose than those that did. ♦

When the arms have borne fruit, they should be cut away in the fall of the year, as soon as the vintage is over, provided there are branches of reserve growing on the shoulders to supply their places: but if the trees have failed in these, notwithstanding all attempts to procure them, the planter must then do what necessity requires, and cut the arms down to two, three, or four good buds each, according to the strength of the vine, remembering not to suffer any fruit to grow on the branches that spring from the lower bud on each old arm, these being now absolutely necessary for branches of reserve, in order to recruit the arms the next year. According to these rules, vines on espaliers must be constantly treated.

As some of the southern States have a hot sandy soil, and are subject to great heats and parching droughts, we shall here offer a few thoughts and directions which we imagine most likely to render the vineyard successful in these hot parching countries.

First, we think it will be found necessary to shade the young vines the first two or three years, during the hot dry seasons, by driving down firmly in the ground branches of trees thick set with leaves, on the south side of the vines; these are better than mats, or pieces of thatch work, as the air and winds can pass more freely through them; it will also be necessary to water the young vines twice a week, during the hot dry seasons, in the evening, that the water may have the whole night to soak down to the roots of the vines, to cool and refresh them; the branches in these hot countries should not be tied up to the stakes, but should be suffered to run on the ground to shade and keep it moist and cool. These vines must be trimmed in the same manner, as those which are designed for stakes, as soon as the leaf falls, or the vintage is over. The third year, instead of fixing stakes to fasten up the branches, short crotches should be drove down about six feet asunder, and pretty strong poles laid across upon them, so that they may lie about fourteen inches from the ground, and so near to each other, that the branches of the vines may conveniently run upon the poles without dipping down and running upon the ground; if the ends of the vines should run beyond the sides of this bed of poles, they must be turned in and confined to their proper beds, because it will be necessary to have a walk or path of two feet wide between the different beds to regulate the vines, to cut away the luxuriant suckers, to gather in the vintage, and to trim the vines.

This bed of poles should be so placed, as to extend three feet on each side of the row of vines, so that the rows of vines standing eight feet asunder, there will be a path of two feet between row and row for the necessary purposes before mentioned. Particular care should be taken not to take away too many branches from these vines, unless there should happen an uncommon wet season, nor to keep them too short, because they are designed to shade the ground as much as possible, in order to keep it cool and moist, which is necessary for the growth of the vine, and for bringing the fruit to perfection; but then in the beginning of August, or about a month before the different sorts of fruits begin to grow ripe, each in their proper time, the lateral branches should be taken away, and the tops of the main

branches cut off; but this must be done, not all at once, but by degrees, according to the dryness or wetness of the season, for the purpose of doing this is to let in the sun and the air, which, at this season of the year becomes necessary to bring the fruit to perfect maturity; the wetter the season at the latter part of the summer, the more branches must be taken away, and the shorter the main branches must be cut, and if necessary most of the leaves must also be plucked off; the fruit will ripen the better, and make the richer wine, and this may be done without any injury to the vines,

The same management with regard to the thinning the branches and the leaves at this season of the year, is necessary for vines that are fastened to stakes or espaliers, in order to meliorate and hasten on the full ripeness of the fruit; the longer white grapes hang on the vines, even after they are ripe, if the season prove dry, the richer wine they make. But it is otherwise with the black grapes, when they are full ripe, they must be gathered, and the wine made; if not, they rot and dry away suddenly, and perish in less than a week.*

We shall now take notice of the different soils and manures that are best for vineyards; a vineyard planted on a piece of good strong new ground needs no manure the first seven years. The best manure for a vineyard is such as is warm and free from grass seeds; fowl's dung of every kind, except water fowl; soap ashes, or other ashes sprinkled thinly between the rows of vines, but not too near them, for this manure is very hot and

* The Portuguese form the head of the vine near the ground, but whether through carelessness, the love of ease, or the want of proper materials, we cannot determine, but they have a method peculiar to themselves of managing their vines; they drive crotches into the ground, upon which they fix strong poles, which lie about three feet from the ground, some more, some less, according to the steepness of the hill, for their vineyards generally grow upon the sides of hills and mountains. The branches of the vines, when grown long enough, they throw over the poles and fasten them; they trim them and nip off the ends of the branches according to art, and in the beginning of autumn, they cut away the lateral branches and nephews at different times, and by degrees pluck away all superfluous leaves, so that the fruit becomes much exposed to the sun, the air and winds, that they may arrive at full maturity. They then gather them and take away all the rotten and unripe fruit, throw them into the vat and tread them, which sufficiently done, they take them out and press them as dry as they can; they then turn the husks into the vat a second time, and although they appear quite dry, yet they trample them over so long, that the very husks seem to dissolve into wine, this they press a second time, and this is laid by for the richest Madeira wine, which in other countries is dashed with water, and made into a thin wine for common use.

sharp;* the rich soil that is washed down and settles along the sides of brooks and rivers, and in many low places along roads and highways; sea sand, mixed with common soil that might be taken up along the highways, would make an excellent manure; in short, sand of every kind, mixed in large proportions with good soil, is very nourishing to vines, for those vines produce the sweetest and richest grapes, and the strongest and best flavoured wines, that grow in rich sandy soils; the mortar of old buildings, that has been made of lime and sand, pounded fine; the dust of charcoal, the small coal and the earth that the coal kilns are covered with when burnt; the foot of chimneys; the small cinders and black dirt found about smiths shops; all these are excellent manures for loomy or clay grounds, to warm, to open and to dry them, and especially if a large quantity of sand be mixed with it; creek mud, or the mud along the sides of rivers, thrown on in the fall, or thrown up and sweetened all winter and laid on in the spring, is a rich manure for sandy lands, or for clay and loomy lands, if mixed with a good quantity of sand. All warm rich untried earth, is excellent, so is street dirt of cities,

The soil cannot be too fresh for a vineyard, provided it is not too rank, and therefore a fresh new soil, that has never been ploughed, at least not in many years, is always recommended as most proper for a vineyard. A clean, light, warm, rich soil, that has a great mixture of sand, is best; a rank, heavy, stubborn soil is not good, it is apt to rot the vines, unless it lies high along the south and south-east sides of hills and mountains; the dryness of the situation, and the intense heat of the sun, greatly alter such a soil, and meliorate it; they open, warm and sweeten it, by drawing out its cold, sour, bitter nature, and render it fit for the richest productions, so that here the strongest and highest flavoured wines are made.

The Roman frame, which served instead of espaliers in ancient times, was plain, cheap, and frugal, fit for farmers, and such as every farmer may procure without expense on his own plantation. It consisted of strong stakes, or small posts, fixed well in the ground in a straight line six feet high, and three rows of poles tied fast to them one above another, and fifteen inches apart, the upper pole being four, five, or six feet from the ground, according to the age of the vine; over the upper

* This manure is best spread on the ground in the fall, that it may mix with the soil and be properly tempered before the heat of the next summer comes on, otherwise it will burn up the plants,

pole the bearing branches were laid, looking toward the south, and were fastened to the pole, and this they called precipitating a vine; when the branches were grown long enough, they were fastened to the middle pole, and then to the lowernost, and when they came near the ground they were cut off. The branches were regularly disposed so that each might have the benefit of the sun and air, by being fastened to stakes driven down at certain distances along the frame, they were trimmed and managed in other respects just in the same manner as those directed for espaliers; and indeed from these frames the espalier was taken.

The materials proper to make bands of to bind the vines to the stakes are, the sweet flag, otherwise called the *calamus aromaticus*. These long flat leaves cut in June, and dried in the shade, and then bundled up and kept in a dry place for use, do very well, but then they must be made wet when used. The long flat leaves of reed, the rushes and three square that grow in marshy or meadow ground, preserved and used in the same manner, do as well.

From these necessary directions for planting and managing vines and vineyards we proceed to the making of wines; a subject which, though short and easy, calls for great nicety and exactness. The making, fermenting and preserving of wine, is a mystery to the people of most countries, but when the methods of managing the process are brought to light and explained, nothing appears more simple and easy. Introductory to this work, it will be necessary to give some directions about gathering the grapes.

We have already observed, that the black grapes differ from the white in the manner of ripening, but whether grapes are black or white, they must be fully ripe before they are gathered, otherwise they will not make good wine: they should be gathered in a fair, dry day, when they are perfectly dry, and all the rotten and unripe grapes must be taken away from every cluster, for they spoil the wine: if the vintage is large and more grapes are gathered than can be mashed and pressed out in one day, care should be taken that they are gathered without bruising, for bruised grapes soon contract an unsavory taste and hurt the wine in proportion; if they are mashed the same day they are gathered, the bruising will do no hurt; nevertheless, we advise the gathering of them with care.

The black grapes are best known to be ripe, when a few of the forwardest grapes begins to shrivel and dry; then they should be gathered and made into wine as fast as possible.

If white frosts happen before some of the grapes are fully ripe though very near it, so as to want no farther feeding, there need not be any apprehensions about them, they may still hang on the vines, for they will grow ripe, rich and high flavoured notwithstanding; but then they must be gathered before the weather is so cold as to freeze them; the light frosts that only kill the leaves do not hurt the fruit, unless it be such as are late ripe; these should be carefully covered from all frosts, they should grow against walls or board fences fronting the south or south-east, and at night be covered with mats, or frames thatched with straw, which should be so contrived as to be set up to cover the fruit or let down at pleasure.

A pretty correct judgment may be formed of the goodness or badness of wine, and of a plentiful or thin vintage, by the seasons of the year; if the spring and former part of the summer prove generally dry; with moderate refreshing rains at intervals; if the season in August and September prove hot and dry, if in the month of June the weather prove calm, serene and dry, when the vine is in blossom, and the fruit is forming, the vintage will in general be plentiful, and the wine rich and good: but if at the time of blossoming the season should prove wet and stormy, the winds high and blustering; if the spring is cold, wet, and backward; if the latter part of the summer and fall is stormy, raw and wet, the vintage will be thin, and the wine bad; when this happens, it will be necessary to boil one-half of the must, and to manage it as hereafter directed.

As the wine made from black grapes has a different management from that made from white grapes, we shall begin with the white:—these must be gathered, as before mentioned, in a fair day, when the grapes are perfectly dry; and both the rotten and unripe fruit carefully plucked off from every bunch; the clusters must then be thrown into the vat, and thoroughly mashed; for the more they are trampled and mashed the better: about Paris they let the murk, that is, the skins, stalks, must and all, stand together in the vat eight and forty hours, and then press it off, but in other parts of France they press off as soon as the grapes are mashed. The last method we should prefer, provided the husks are mashed or trod over again in the Portuguese manner, otherwise we should prefer the method practised by the people about Paris, for this reason, because there is a rich pulp that adheres to the skin of the grape, which is not separated by the first treading; but by lying eight and forty hours in the murk, and the vat covered close, which is the

practice, a pretty strong fermentation is begun and continued some time, which partly dissolves and partly loosens this rich pulp, which then chiefly comes away by pressing; however, we are of opinion, that the treading of these husks after the fermentation, the must having first run off into the receiver, would do the work more effectually if they were well pressed after it. But then this caution must be attended to, that if vines are young, which always afford a thin, weak wine, or if the seasons have been wet and bad, so that the juices are not rich, in those cases the must should be boiled before any fermentation, in order to preserve the wine, in that case the Portuguese method should be pursued, because the boiling of wine after the fermentation has begun would entirely spoil it; the sweet must only, as it runs from the treading into the receiver, should be boiled. The first and second pressing being mixed together, is put into hogsheds, which should be filled within four inches of the bung, that it may have room to work and ferment, the casks being placed in some warm room or dry cellar. Then having a small spile fixed in the middle of the head of the cask, the third or fourth day a little of the wine should be drawn in a glass, and if it is pretty fine, drawn off immediately into a clean dry well-scented cask, the larger the better, so there is wine enough to fill it within two inches of the bung; it must then be stopped close, leaving only the vent-hole open for a second fermentation; after a few days it will work a second time, but not so much as at the first. If the wine is strong and good, which may be known by the age of the vineyard, and the goodness of the seasons, it will be best to leave the bung-hole open for this second working, in which case the wine will be the better; for strong wines require a greater fermentation than weak, and the stopping of the bung-hole is a check upon the working, and prevents weak wines from spending themselves too much, which must greatly hurt them; on the contrary, if strong wines have not a thorough working, they are apt to grow thick and ropy, which hurts them as much the other way; by this the wine-maker may form a proper judgment what degree of fermentation is proper for the wine that is under working, and govern himself accordingly. Three or four days after the second fermentation begins, which should be carefully watched, the wine should be again tried in a glass, and if it is pretty fine, a sweet cask should be prepared, and a good large brimstone match burned in it; as soon as the match is burnt out, whilst the cask is full of smoke,

the wine should be drawn off into it, the cask filled to the brim, and bunged up tight and the vent-hole stopped; the smoke of the brimstone will hinder any farther fermentation: this is called *stunning*: a mortar of clay and horse-dung, mixed up with strong flax-seed tea, should then be made, and the bung and vent-hole covered close with it, and then it should stand till it is fit to sell or to use.

When the wine-maker first racks off his wine, if he has any old wine that is rich and good, of the same kind or colour, he should put four or six gallons of it, and two gallons of good brandy into the cask, (this quantity is sufficient for an English hoghead) and then rack off the wine into it for the first time; this will greatly strengthen and preserve the wine, and if it is weak, it will hinder too great a fermentation the second time, and so preserve the purer spirits from flying off.

When wine is in fermentation, all the gross parts are thrown up to the top of the cask or vessel that it ferments in, and there meeting the air, they undergo a very great change, they contract a harshness and become rancid. If then they are suffered to pass down through the body of the wine, which they certainly will do as soon as the fermentation is over, they will communicate those evil qualities to the wine, and it must be a strong wine indeed that will stand such a shock, and if the wine is weak, it will soon turn sour; if the wine is strong, and has a sufficient stock of native spirits to defend it from those bad impressions, yet it will contract an unfavourable harshness which will not be removed for some time, nor will it be fit for drinking till age has smoothed and made it mellow. For this reason it is that wine should be drawn off both times before the fermentation is quite over; and as to weak wines, they should by no means work too much either time, three days are quite sufficient for each working; strong wines should work longer for the reason above assigned; they are better able to stand it; besides, it prevents ropiness, and they fine the sooner and better for it.

We now pass on to the making of red wines from the black grapes. In France, red wines are managed in the following manner: the whole of one or even two days treading or mashing, when the vintage is great, is thrown into a large vat, the must, stalks, skins and all, and stands in some warm dry place or cellar. The vat is covered close with sheets or blankets, or both, and thus it remains, from four to seven or even ten days, according to the coldness or heat of the weather. This is done to obtain a strong fermentation, in order to give a deeper colour to the wine,

and this is the only end proposed by it; the manager of this work visits the vat twice a day, and in a glass views the colour of the wine and tastes it; if the tincture is not deep enough to his mind, he knows by the taste of the wine, whether it will stand a longer fermentation; if it will not, he contents himself with the colour it has, and draws and presses it off, and fills it into casks, leaving about two inches from the bung for a second fermentation. When the second fermentation is over, which generally happens in four or five days, he then draws it off into clean well-scented casks, and adds to it six gallons of good old wine, and two gallons of brandy, to an English hoghead, which contains from sixty to sixty-three gallons. Where the same kind of wine is not to be had, he makes use of port wine.* He then fills the cask quite full and bungs it up tight, leaving only the vent-hole open to let out the generated air.

This management of red wines, which perhaps, with little variation, is almost as ancient as the making of wine in France, deserves some attention and a close examination, inasmuch as we are fully persuaded, that it is capable of an essential improvement.

To understand the nature of this process rightly, it must be remembered that, besides the main pulp or core of the grape, which is white in black grapes as well as others, there sticks to the inside of the skin a considerable body of rich pulp, which is perfectly red, of a deeper die in some than in others: this pulp gives the colour to the grape, according to the lightness or deepness of its tincture: thus we see some grapes of a light red, some of a full red, and some of a deep red: some again are almost black, some quite black, and some of a shining jet: this same pulp also gives the tincture or colour to the wine, for the same grape is capable of making white wine as well as red wine; if the main core, which is first trod out, be only used, the wine will be white; thus they make white Burgundy, &c. but if the red pulp be mixed with it, it makes it of a rich purple colour. As this is a clear case, and lies exposed to every discerning eye, the great point of improvement to be gained, is to dissolve or extract this rich pulp, without injuring the wine. That the present method is the best and most effectual to that purpose, we can by no means think; the violent ferment-

* When we say, "where the same kind of wine is not to be had, he makes use of Portugal wines," this is mentioned with a view to the United States, not that the French make use of such wines, for they always have enough of their own of the same kind.

tation through which the wine is made to pass, in order to procure the tincture, must exhaust the spirits in a very great degree, and leave the body weak and subject it to harshness, to turn eager or vapid in a short time; these wines grow worse not better by age: many instances of this kind we meet with in the French clarets, among which, where one hogshhead proves good, sound and wholesome, ten, not to say twenty, prove harsh and disagreeable. These considerations have led many to think, that the present management calls for a reformation. The following experiment was made some years back in New-Jersey, which seems to have answered: in a clean stone pot, wide and open, containing two gallons, was squeezed as many Burgundy grapes as nearly filled it, with the liquor and skins; the stalks left out. It stood in a dry room covered with a coarse dry towel four double, four days and nights fermenting; it was then strained off and the skins very well mashed with the hand; by this means there was obtained a full deep tincture of that kind of purple that is peculiar to the Burgundy wine; it was then left to ferment in a large case bottle: after the first and second fermentations were over, there was found about a quart of rich sediment at the bottom, and a pretty thick skin formed on the top; the smell was very pleasant and truly vinous, the just indications of a sound, healthy wine. By this experiment it appears, that three days fermentation, allowing the first day for heating, which is preparatory to fermentation,* is sufficient to obtain a tincture, with the help of squeezing the skins a second time, without injuring the wine; it was found, that what red pulp remained adhering to the skins, separated from them very easily, and by the colour of the wine, before the second squeezing, that the fermentation had dissolved most of this pulp, or extracted a great part of its tincture. From this process there is reason to conclude, that if the husks or skins, after four days lying in the muck, were taken out and thrown into the mash vat, and heartily trod over again, and especially if some of the must, or rather wine, (for it is wine after fermentation) was now and then thrown over the husks, as they are trampling it in order to wash away the pulp, that a full tincture might be obtained without treating the wine, as the present manner is, and without running so great a risk of spoiling it.

As this is a very important point, upon the right management of which depends the goodness of the wine, and as a farther

* The degrees of heat are mentioned by Boerhaave, Hoffman and others.

improvement is hereby designed, we have dwelt the longer upon the subject, and therefore hope it will not be considered as a useless digression.

Wine made from young vineyards is always thin and weak, and so are wines from old vineyards, when the seasons have been cold, stormy and wet, and without some assistance they will not hold sound long; this assistance is given two ways, either by the help of some old strong wine, one fourth part at least, and four gallons of brandy to an English hoghead, or if that is not to be obtained, then half of the must should be boiled away to one-half of its quantity, that is, if one-half of the must contains forty gallons, that must be boiled away to twenty, this greatly enriches it, and makes it of the consistence of liquid honey: as soon as it is cool, mix it with the rest of the must, and let it ferment together, and then manage it as other wines: when a vineyard comes to be ten or twelve years old, it will yield much stronger wines.

The boiling of must is managed in the following manner, which should be carefully attended to: the copper or kettle being well cleaned, the inside should be rubbed over with a woollen rag dipped in sweet oil, which preserves the wine from contracting a nauseous, copper or brass taste; the must should be then thrown in, and a gentle fire kindled under the copper with brush or small split wood, the copper standing so high that the wood need not touch the bottom of it; for if at any time the wood touches the bottom of the kettle or copper, the wine will be burned, which will spoil it; it should therefore be stirred often from the bottom, and the scum taken off as it rises till clear; the must boiled away is called *destrutum*, or the rob of grapes. If there is a neglect in raising the sediment from the bottom of the copper, it will burn and spoil the wine, as it turns it bitter.

And here we must caution every one who attempts to make wine, to be strictly careful to have all the vessels and instruments made use of in this work perfectly clean and sweet; for if they have any sour, unfavoury or offensive smell, they will communicate it to the must and spoil the wine; and every thing that has an offensive or disagreeable smell should be removed from the place where wine is made, and from the cellars where it is kept; the cellar ought to be dry and warm, for damps or wet hurt wines exceedingly: it must also be free from mustiness, and, in good weather, the windows next the south and west should be opened, to admit the warm dry air, which will prevent mustiness and dangerous damps.

Hogheads well bound with iron are the only safe casks for wine; if old wine pipes, or hogheads with wooden hoops, are trusted, it is ten to one but they deceive; they constantly want repairing every year, but iron-bound casks will hold many years without any expense at all, so that in three years time they become by much the cheapest casks, we mean for standing casks, out of which the wine is racked into other casks for sale; but then as soon as they are empty the lees should be taken out, and saved for distilling into brandy, and the same day the cask filled with water, or else they will be destroyed by a small worm, which will pierce it like a sieve.

Every man that has a vineyard should have a still and good worm, that he may distill all the lees, the husks and the scum into good brandy, which he will want for the preservation of his wines; the same still will do to make peach brandy and the spirits of cyder, which will soon pay for it. A still that holds a barrel is quite large enough, unless his vineyards and orchards be very large indeed.

We now pass to the different management of wine after fermentation; one method we have already mentioned: some, after the second fermentation, leave the wine in the same cask upon the lees, and adding the old wine and brandy to it, they stop up the bung-hole, and leave only the vent-hole open to let out the generated air, till the month of March, filling up the cask from time to time as the wine subsides or wastes, and then draw it off into a clean, well-scented and well stummed cask, and stop all close with mortar.

Others again, in the month of March, before they rack it off and stum it, roll the cask backward and forward in the cellar to mix the lees thoroughly with the wine, thinking thereby to communicate the strength of the lees to the wine, and then let it stand and settle till it is fine, and rack it off into clean well-stummed casks, and stop and plaister all up close.*

* It is proper to notice, that the lees of strong wines may be of advantage, and communicate some strength to weak wines, that are racked off upon them, but it does not therefore follow, that all lees are beneficial to the wines that produce them; for, as we have already observed, the lees in the time of fermentation, being thrown up to the top of the vessel, there meet with the air, and being exposed to it for four or five days, contract a harsh and rancid nature, if they do not grow quite sour; and then subsiding, as soon as the fermentation is over, and settling to the bottom of the cask, where they are left for the wine to feed upon, we leave any man to judge what kind of food this must be, and what manner of good it can communicate to the wine. But so rigid and arbitrary is custom, that it is even looked upon next to rebellion, to deviate or depart from the customs of our fathers. The cyder made in America for above

It will be no doubt observed, that we have been silent in this essay, about vines that are natives of America: the reason is, they have in part already been noticed, and their qualities in general described: they are in general supposed to be much more untractable than those of Europe: they are very hardy, and will stand the frame, for they brave the severest storms and winter blasts: they shrink not at snow, ice, hail or rain; the wine they afford is strong and good.

The fox-grape, whose berries are large and round, delights most in a rich sandy loam; here they grow very large and the berries are sweetest; but they will grow in any grounds, wet or dry; those that grow on high grounds generally become white, and the colour alters to a dark red or black, according to the lowness or wetness of the ground: the situation, we think, must greatly affect the wine, in strength, goodness and colour; the berries are generally ripe the beginning of September, and when fully ripe they soon fall away: thus much we have observed as they grow wild; what alteration they may undergo, or how much they may be improved by proper soils and due cultivation, we cannot say.

There is a small black grape, a size bigger than the winter grape, that is ripe in September; it is pleasant to eat, and makes a very pleasant wine. These are well worth cultivating, as is the grape of Scioto and the newly-discovered grape of Indian river in Maryland, which promises to be a valuable acquisition to the vineyard.

The frost, or winter grape, is known to most persons; both the bunches and berries are small, and yield but little juice, but the richness of the wine may make up for the smallness of the quantity; the taste of the grape is austere till pretty hard frosts come, and then it takes a favourable turn and becomes very sweet and agreeable: this vine shoots forth great numbers of slender branches, and might do very well for the south and south-east sides of a summer-house or clove walk, if all the useless and barren branches were cut away. The vines of America, in general,

one hundred years was constantly spoiled by this mistake. Every man that makes cyder very well knows, how soon the pumice corrupts and grows sour by being exposed to the air, and yet no man in all this time ever prevented the pumice, after fermentation, from settling down through the whole body of cyder, but there left it to remain for his cyder to feed upon all winter, and indeed all the next summer too, if it lasted so long, and therefore complained of the hardness of his cyder, and so did every body else that drank it; and yet this long remained without a remedy, because it had been the custom of their fathers.

are fit for strong high espaliers, but they must be watched narrowly, and every unnecessary and unprofitable branch taken away.

The native vines of the northern and middle States have a covering of bark of so close and firm a texture, that they stand all weathers without injury; they fear nothing but a frost after they put forth the tender bud. We know that cold winds and winter blasts have a great effect upon the human body, they brace up and confirm all the solids, harden and strengthen the whole frame, and render a man active, brisk and lively: they have likewise a wonderful effect upon the brute creation; the covering of sheep, cattle and horses, in hot countries, is very thin and cool, remove them into a cold region, sheep soon acquire a covering of wool, horses and cattle a thick coat of hair. Why then should not vines, by being transplanted from a warm into a cold region, acquire a firmness and covering suitable to their new situation? We believe, by a proper management, that they may by degrees be inured to colder countries, but such a hardiness must not be supposed to be acquired all at once but by being, winter after winter, a little more and more exposed to the severities of the weather: they may thus in a few years be, in a great measure, reconciled to almost any climate; late ripe fruits, however, will not do as yet to the northward of the capes of Virginia; it is the early ripe fruits that the middle States must cultivate, till the climate becomes more temperate by the country's being cleared farther back; none that ripen much after October will suit at present, and the latest they raise, should arrive at full maturity by the end of November.

ON THE CULTURE OF SUGAR MAPLE, &c.

The *acer saccharinum* of Linnæus, or the sugar maple, as before observed, grows in great quantities in the western countries of all the middle States of the American Union. Those which grow in New-York and Pennsylvania yield the sugar in a greater quantity than those which grow on the waters of the Ohio. These trees are generally found mixed with the beach, hemlock, white and water ash, the cucumber tree, linden, aspen, butter nut, and wild cherry trees: they sometimes appear in groves covering five or six acres in a body, but they are commonly interspersed with some or all of the forest trees which have been mentioned. From thirty to fifty trees are generally found upon an acre of ground. They grow chiefly in the richest soils, and frequently in stony ground. Springs of the purest water abound

in their neighbourhood. They are, when fully grown, as tall as the white and black oaks, and from two to three feet in diameter;* they put forth a beautiful white blossom in the spring before they shew a single leaf; the colour of the blossom distinguishes them from the acer rubrum, or the common maple, which affords a blossom of a red colour. The wood of the sugar maple is of an inflammable nature, and is preferred upon that account by hunters and surveyors for fire-wood. Its small branches are so much impregnated with sugar as to afford support to the cattle, horses and sheep, of the first settlers during the winter, before they are able to cultivate forage for that purpose. Its ashes afford a great quantity of pot-ash, exceeded by few or perhaps by none of the trees that grow in the woods of the United States.

The tree is supposed to arrive at its full growth in the woods in twenty years.

It is not injured by tapping : on the contrary, the oftener it is tapped the more syrup is obtained from it. In this respect it follows the law of animal secretion. A single tree has not only survived, but flourished after *forty-two* tapplings in the same number of years. The effects of a yearly discharge of sap from the tree in improving and increasing the sap, is demonstrated from the superior excellence of those trees which have been perforated in an hundred places, by a small wood-pecker which feeds upon the sap. The trees, after having been wounded in this way, distil the remains of their juice on the ground, and afterwards acquire a black colour. The sap of these trees is much sweeter to the taste than that which is obtained from trees which have not been previously wounded, and it affords more sugar.

From twenty-three gallons and one quart of sap procured in twenty hours from only two of these dark-coloured trees, Arthur Noble, Esq. of the State of New-York, obtained four pounds and thirteen ounces of good grained sugar.

A tree of an ordinary size yields, in a good season, from twenty to thirty gallons of sap, from which are made from five to six pounds of sugar : to this there are sometimes remarkable exceptions : Samuel Low, Esq. a justice of peace in Montgo-

* Baron La Hontan, in his voyage to North-America, gives the following account of the maple tree in Canada. After describing the black cherry tree, some of which, he says, are as tall as the loftiest oaks and as big as a hoghead, he adds, " The maple tree is much of the same height and bulk : it bears no resemblance to that sort we have in Europe."

inery county, in the State of New-York, informed Arthur Noble, Esq. that he made twenty pounds and one ounce of sugar between the 14th and 23d of April, in the year 1789, from a single tree that had been tapped for several successive years before.

From the influence which culture has upon forest and other trees, it has been supposed, that by transplanting the sugar maple tree into a garden, or by destroying such other trees as shelter it from the rays of the sun, the quantity of the sap might be increased, and its quality much improved. We have heard of one fact which favours this opinion: A farmer in Northampton county, in the State of Pennsylvania, planted a number of these trees about twenty-seven years ago in his meadow, from less than *three* gallons of the sap of which, he obtains every year a pound of sugar. It was observed formerly, that it required five or six gallons of the sap of the trees which grow in the woods, to produce the same quantity of sugar.

The sap distils from the *wood* of the tree: trees which have been cut down in the winter for the support of the domestic animals of the new settlers, yield a considerable quantity of sap as soon as their trunks and limbs feel the rays of the sun in the spring of the year.

It is in consequence of the sap of these trees being equally diffused through every part of them, that they live three years after they are *girdled*, that is, after a circular incision is made through the bark into the substance of the tree, for the purpose of destroying it.

It is remarkable, that grass thrives better under this tree in a meadow, than in situations exposed to the constant action of the sun.

The season for tapping the trees is in February, March and April, according to the weather which occurs in these months.

Warm days and frosty nights are most favourable to a plentiful discharge of sap.* The quantity obtained in a day from a tree is from five gallons to a pint, according to the greater or less heat of the air. A Mr. Low informed Arthur Noble, Esq. that he

* The influence of the weather in increasing and lessening the discharge of the sap from trees is very remarkable.

Dr. Tonge supposed long ago (Philosophical Transactions, No. 68,) that changes in the weather of every kind might be better ascertained by the discharge of sap from trees than by weather glasses. I have seen a journal of the effects of heat, cold, moisture, drought and thunder, upon the discharges from the sugar trees, which disposes me to admit Dr. Tonge's opinion. *Dr. Rush,*

obtained near three and twenty gallons of sap in one day, (April 14, 1789) from the single tree which was before mentioned. Such instances of a profusion of sap in single trees are, however, not very common.

There is always a suspension of the discharge of sap in the night if a frost succeed a warm day. The perforation in the tree is made with an ax or an auger ; the latter is preferred from experience of its advantages : the auger is introduced about three-fourths of an inch, and in an ascending direction, that the sap may not be frozen in a slow current in the mornings or evenings, and is afterwards deepened gradually to the extent of two inches. A spout is introduced about half an inch into the hole made by this auger, and projects from three to twelve inches from the tree. The spout is generally made of the summach,* or elder,† which generally grow in the neighbourhood of the sugar trees. The tree is first tapped on the south side ; when the discharge of its sap begins to lessen, an opening is made on its north side, from which an increased discharge takes place. The sap flows from four to six weeks, according to the temperature of the weather. Troughs large enough to contain three or four gallons made of white pine, or white ash, or of dried water ash, aspen, linden,‡ poplar or common maple, are placed under the spout to receive the sap, which is carried every day to a large receiver, made of either of the trees before mentioned. From this receiver it is conveyed, after being strained, to the boiler.

To preserve the sap from rain and impurities of all kinds, it is a good practice to cover the troughs with a concave board, with a hole in the middle of it.

It remains yet to be determined, whether some artificial heat may not be applied so as to increase the quantity and improve the quality of the sap. Mr. Noble informed Dr. Rush, that he saw a tree, under which a farmer had accidentally burnt some brush, which dropped a thick heavy syrup resembling molasses : this fact may probably lead to something useful hereafter.

During the remaining part of the spring months, as also in the summer, and in the beginning of autumn, the maple tree yields a thin sap, but not fit for the manufactory of sugar : it affords a pleasant drink in harvest, and has been used instead of rum, in some instances, by those farmers in Connecticut, whose ancestors have left to them here, and there, a sugar maple tree, probably to shade their cattle, in all their fields. Mr. Bruce describes a drink of the same kind, prepared by the inhabitants of Egypt,

* Rush.

† *Sambucus Canadensis*.‡ *Liriodendrum tulipifera*.

by infusing the sugar cane in water, which he declares to be "the most refreshing drink in the world."*

There are three methods of reducing the sap to sugar :

FIRST, By *freezing it*. This method has been tried for many years by a Mr. Obadiah Scott, a farmer in Luzerne county, in Pennsylvania, with great success. He says, that one-third of a given quantity of sap reduced in this way, is better than one-half of the same quantity reduced by boiling. If the frost should not be intense enough to reduce the sap to the graining point, it may afterwards be exposed to the action of the fire for that purpose.

SECONDLY, By *spontaneous evaporation*. The hollow stump of a maple sugar tree, which had been cut down in the spring, and which was found some time afterwards filled with sugar, first suggested this method of obtaining sugar to our farmers. So many circumstances of cold and dry weather, large and flat vessels, and above all, so much time, are necessary to obtain sugar, by either of the above methods, that the most general method among the farmers is to obtain it.

THIRDLY, By *boiling*. For this purpose the following facts, which have been ascertained by many experiments, deserve attention :

1. The sooner the sap is boiled, after it is collected from the tree, the better ; it should never be kept longer than twenty-four hours before it is put over the fire.

2. The larger the vessel is in which the sap is boiled, the more sugar is obtained from it.

3. A copper vessel affords a sugar of a fairer colour than an iron vessel.

The sap flows into wooden troughs, from which it is carried, and poured into store troughs or large cisterns, in the shape of

* Baron La Hontan gives the following account of the sap of the sugar maple tree, when used as a drink, and of the manner of obtaining it : " The tree yields a sap which has a much pleasanter taste than the best lemonade or cherry water, and makes the wholesomest drink in the world. This liquor is drawn by cutting the tree two inches deep in the wood, the cut being made sloping to the length of ten or twelve inches ; at the lower end of this gash a knife is thrust into the tree slopingly, so that the water runs along the cut or gash, as through a gutter, and falls upon the knife, which has some vessels placed underneath to receive it. Some trees will yield five or six bottles of this water in a day, and some inhabitants of Canada might draw twenty hogsheds of it in one day, if they would thus cut and notch all the maple trees of their respective plantations. The gash does no harm to the tree. Of this sap they make sugar and syrup, which is so valuable, that there can be no better remedy for fortifying the stomach ; it is but few of the inhabitants that have the patience to make them, for as common things are slighted, so there are scarce any body but children that give themselves the trouble of gashing these trees."

a canoe or large manger, made of white ash, linden, bass wood, or white pine. from which it is conveyed to the kettle in which it is to be boiled. These cisterns, as well as the kettle, are generally covered by a shed to defend the sap from the rain. The sugar is improved by straining the sap through a blanket or cloth, either before or after it is half boiled. Butter, hog's lard, or tallow, are added to the sap in the kettle, to prevent its boiling over; and lime, eggs, or new milk, are mixed with it, in order to clarify it. Clear sugar, however, may be made without the addition of either of them. A spoonful of slacked lime, the white of one egg, and a pint of new milk, are the usual proportions of these articles, which are mixed with fifteen gallons of sap. In some samples of maple sugar, clarified with each of the above articles, that in which milk alone was used, had an evident superiority in point of colour.

The sugar after being sufficiently boiled is grained and clayed, and afterwards refined, or converted into loaf sugar. The methods of conducting each of these processes is so nearly the same with those which are used in the manufactory of West-India sugar, and are so generally known, that we need not spend any time in describing them.

It has been a subject of inquiry, whether the maple sugar might not be improved in its quality, and increased in its quantity, by the establishment of boiling houses in the sugar maple country, to be conducted by associated labour. From the scattered situation of the trees, the difficulty of carrying the sap to a great distance, and from the many expenses which must accrue from supporting labourers and horses in the woods, in a season of the year in which nature affords no sustenance to man or beast, we are disposed to believe, that the most productive method both in quantity and profit of obtaining this sugar, will be by the labour of private families. For a great number of years, many hundred private families in New-York and Pennsylvania have supplied themselves plentifully with this sugar during the whole year. We have heard of many families who have made from two to four hundred pounds in a year; and of one man who sold six hundred pounds all made by his own hands in one season.*

* The following receipt, published by William Cooper, Esq. in the Albany Gazette, fully establishes this fact.

"Received, Cooper's Town, April 30th, 1795, of William Cooper, sixteen
 "pounds, for six hundred and forty pounds of sugar, made with *my own hands*,
 "without any assistance, in less than four weeks, besides attending to the other
 "business of my farm, as providing fire wood, taking care of the cattle, &c.
 "John Nicholls. Witnesses, R. Smith."

A single family, consisting of a man and his two sons, on the maple sugar lands between the Delaware and Susquehannah, made one thousand eight hundred pounds of maple sugar in one season.

Not more knowledge is necessary for making this sugar than cyder, beer, four krout, &c. and yet one or all of these are made in most of the farm houses of the United States. The kettles and other utensils of a farmer's kitchen will serve most of the purposes of making sugar, and the time required for the labour, if it deserves that name, is at a season when it is impossible for the farmer to employ himself in any species of agriculture. His wife and all his children above ten years of age, moreover may assist him in this business, for the profit of the weakest of them is nearly equal to that of a man when hired for that purpose.

A comparative view of this sugar has been frequently made with the sugar which is obtained from the West-India sugar cane, with respect to its quality, price, and the possible or probable quantity that can be made of it in the United States, each of which we shall consider in order.

FIRST. The quality of this sugar is necessarily better than that which is made in the West-Indies. It is prepared in a season when not a single insect exists to feed upon it, or to mix its excrements with it, and before a particle of dust or of the pollen of plants can float in the air. The same observation cannot be applied to the West-India sugar. The insects and worms which prey upon it, and of course mix with it, compose a page in a nomenclature of natural history. We shall say nothing of the hands which are employed in making sugar in the West-Indies, but that men who work for the exclusive benefit of others are not under the same obligations to keep their persons clean while they are employed in this work, that men, women and children are, who work exclusively for the benefit of themselves, and who have been educated in the habits of cleanliness. The superior purity of the maple sugar is farther proved by its leaving a less sediment when dissolved in water than the West-India sugar.

It has been supposed that the maple sugar is inferior to the West-India sugar in strength. The experiments which led to this opinion we suspect have been inaccurate, or have been made with maple sugar prepared in a slovenly manner. Dr. Rush examined equal quantities by weight of both the grained and the loaf sugar, in hyson tea, and in coffee, made in every respect equal by the minutest circumstances that could affect the quality or taste of each of them, and could perceive no inferiority in the strength of the maple sugar. The liquors which decided this question were examined at the same time by Alexander Hamilton, Esq. secretary of the treasury of the United States, Mr. Henry Drinker, and several ladies, who all concurred in the above opinion,

SECONDLY. Whoever considers that the sugar maple tree grows spontaneously without cultivation, that the Americans have many millions of acres in their country covered with them, that the tree is improved by repeated tappings, and that the sugar is obtained by the frugal labour of a farmer's family, and at the same time considers the labour of cultivating the sugar cane, the capitals sunk in sugar works, the first cost of slaves and cattle, the expenses of provisions for both of them, and in some instances the additional expense of conveying the sugar to a market in all the West-India islands, will not hesitate in believing that the maple sugar may be manufactured much cheaper, and sold at a less price than that which is made in the West-Indies.

THIRDLY. The resources for making a sufficient quantity of this sugar, not only for the consumption of the United States, but for exportation, will appear from the following facts. There are in the States of New-York and Pennsylvania alone, at least ten millions of acres of land which produce the sugar maple tree, in the proportion of thirty trees to one acre. Now supposing all the persons capable of labour in the family to consist of three, and each person to attend one hundred and fifty trees, and each tree to yield five pounds of sugar in a season, the product of the labour of sixty thousand families would be one hundred and thirty-five million pounds of sugar; and allowing the inhabitants of the United States to compose six hundred thousand families, each of which consumed two hundred pounds of sugar in a year, the whole consumption would be one hundred and twenty million pounds in a year, which would leave a balance of fifteen million pounds for exportation. Valuing the sugar at six-ninetieths of a dollar per pound, the sum saved to the United States would be eight million dollars by home consumption, and the sum gained by exportation would be one million dollars. The only part of this calculation that will appear improbable is, the number of families supposed to be employed in the manufactory of the sugar, but the difficulty of admitting this supposition will vanish when we consider, that double that number of families are employed every year in making cyder, the trouble, risks and expenses of which are all much greater than those of making maple sugar.

But the profit of the maple tree is not confined to its sugar; it affords an agreeable molasses, and an excellent vinegar. The sap which is suitable for these purposes, is obtained after the sap which affords the sugar has ceased to flow, so that the manufactories of these different products of the maple tree, by succeeding, do not interfere with each other. The molasses may be made to compose the basis of a pleasant summer beer. The sap

of the maple is moreover capable of affording a spirit, but we hope this precious juice will never be prostituted by American citizens to this ignoble purpose. Should the use of sugar diet become more general in America, it may tend to lessen the inclination or supposed necessity for spirits, for a relish for sugar in diet is seldom accompanied by a love of strong drink. It is the sugar which is mixed with tea which makes it so generally disagreeable to drunkards; but a diet consisting of a plentiful mixture of sugar has other advantages to recommend it, which we shall briefly enumerate.

FIRST. Sugar affords the greatest quantity of nourishment in a given quantity of matter of any substance in nature; of course it may be preserved in less room in our houses, and may be consumed in less time than more bulky and less nourishing aliment. It has this peculiar advantage over most kinds of aliment, that it is not liable to have its nutritious qualities affected by time or the weather, hence it is preferred by the Indians in their excursions from home. They mix a certain quantity of maple sugar, with an equal quantity of Indian corn, dried and powdered, in its milky state. This mixture is packed in little baskets, which are frequently wetted in travelling, without injuring the sugar. A few spoonfuls of it mixed with half a pint of spring water, afford them a pleasant and strengthening meal. From the degrees of strength and nourishment which are conveyed into animal bodies by a small bulk of sugar, we conceive it might be given to horses with great advantage, when they are used in places or under circumstances which make it difficult or expensive to support them with more bulky or weighty aliment. A pound of sugar without grass or hay, we have been told, has supported the strength and spirits of an horse, during a whole day's labour in one of the West-India islands. A larger quantity given alone has fattened horses and cattle during the war before last in Hispaniola, for a period of several months, in which the exportation of sugar, and the importation of grain, were prevented by the want of ships.

SECONDLY. The plentiful use of sugar in diet is one of the best preventatives that has ever been discovered of the diseases which are produced by worms. Nature seems to have implanted a love for this aliment in all children, as if it were on purpose to defend them from those diseases. A gentleman in Philadelphia who early adopted this opinion, by indulging a large family of children in the use of sugar, has preserved them all from the diseases usually occasioned by worms.

THIRDLY. Sir John Pringle has remarked, that the plague has never been known in any country where sugar composes a material part of the diet of the inhabitants. We think it probable that the frequency of malignant fevers of all kinds has

been lessened by this diet, and that its more general use would defend that class of people who are most subject to malignant fevers from being so often affected by them.

FOURTHLY. In the numerous and frequent disorders of the breast, which occur in all countries, where the body is exposed to a variable temperature of weather, sugar affords the basis of many agreeable remedies: it is useful in weakneses, and acrid desfluxions upon other parts of the body. Many facts might be adduced in favour of this assertion. We shall mention only one, which, from the venerable name of the person whose case furnished it, cannot fail of commanding attention and credit. Upon Dr. Rush inquiring of Dr. Franklin, at the request of a friend about a year before he died, whether he had found any relief from the pain of the stone from the blackberry jam, of which he took large quantities, he told him that he had, but that he believed the medicinal part of the jam resided wholly in the sugar; and as a reason for thinking so, he added, that he often found the same relief by taking about half a pint of syrup, prepared by boiling a little brown sugar in water, just before he went to bed, that he did from a dose of opium. It has been supposed by some of the early physicians of America, that the sugar obtained from the maple tree is more medicinal than that obtained from the West-India sugar-cane; but this opinion is, perhaps without foundation; it is preferable in its qualities to the West-India sugar perhaps only from its superior cleanliness.

Cases may occur in which sugar may be required in medicine, or in diet, by persons who refuse to be benefited, even indirectly by the labour of slaves. In such cases the innocent maple sugar will always be preferred.*

It has been said that sugar injures the teeth, but this opinion now has so few advocates, that it does not deserve a serious refutation.

To transmit to future generations all the advantages which have been enumerated from the maple tree, it will be necessary to protect it by law, or by a bounty upon the maple sugar, from being destroyed by the settlers in the maple country, or to transplant it from the woods, and cultivate it in the old and improved parts of the United States. An orchard consisting of two hundred trees, planted upon a common farm, would yield more than the same number of apple trees at a distance

* Dr. Knowles, a physician of worthy character in London, had occasion to recommend a diet to a patient, of which sugar composed a material part. His patient refused to submit to his prescription, and gave as a reason for it, that he had witnessed so much of the oppression and cruelty which were exercised upon the slaves, who made the sugar, that he had made a vow never to taste the product of their misery as long as he lived.

from a market town. A full grown tree in the woods yields five pounds of sugar in a year. If a greater exposure of a tree to the action of the sun has the same effects upon a maple that it has upon other trees, a larger quantity of sugar might reasonably be expected from each tree planted in an orchard. Allowing it to be only seven pounds, then two hundred trees will yield one thousand four hundred pounds of sugar; and deducting two hundred from the quantity for the consumption of the family, there will remain for sale one thousand two hundred pounds, which at six-ninetieths of a dollar per pound, will yield an annual profit to the farmer of eighty dollars. But if it should be found that the shade of the maple does not check the growth of grain any more than it does of grass, double or treble that number of maple trees may be planted on every farm, and a profit proportioned to the above calculation be derived from them. Should this mode of transplanting the means of obtaining sugar be successful, it will not be a new one. The sugar cane of the West-Indies was brought originally from the East-Indies by the Portuguese, and cultivated at Madeira, from whence it was transplanted directly or indirectly to all the sugar islands of the West-Indies.

It were to be wished that the settlers upon the sugar maple lands would spare the sugar tree in clearing their lands. On a farm of two hundred acres of land, according to our former calculation, there are usually six thousand maple trees. If only two thousand of those original and ancient inhabitants of the woods were suffered to remain, and each tree were to afford only five pounds of sugar, the annual profit of such a farm in sugar alone, at the price formerly mentioned, would amount to six hundred and sixty-six dollars, one hundred and fifty dollars of which would probably more than defray all the expenses of making it, and allow a plentiful deduction for family use.

According to the usual annual profit of a sugar maple tree, each tree is worth to a farmer two dollars, and two-thirds of a dollar, exclusive therefore of the value of his farm, the two thousand sugar maple trees alone confer a value upon it of five thousand three hundred and thirty-three dollars, and thirty-ninetieths of a dollar.

It is said that the sugar trees, when deprived of the shelter and support they derive from other forest trees, and liable to be blown down, occasioned by their growing in a rich, and of course a loose soil. To obviate this, it will only be necessary to cut off some of their branches so as to alter its center of gravity,

and to allow the high winds to have an easy passage through them. Orchards of sugar maple trees, which grow with an original exposure of all their parts to the action of the sun, will not be liable to this inconvenience.

In contemplating the present opening prospects in human affairs, we are led to expect that a material part of the general happiness which Heaven seems to have prepared for mankind, will be derived from the manufactory and general use of maple sugar, for the benefits which we flatter ourselves are to result from it, will not be confined to America; they will, we hope, extend themselves to the interests of humanity in the West-Indies. With this view of the subject, we cannot help contemplating a sugar maple tree with a species of affection and even veneration, for we have persuaded ourselves to behold in it the happy means of rendering the commerce and slavery of our African brethren in the sugar islands as unnecessary, as it has always been inhuman and unjust.

To the above we add a copy of Mr. Botham's account of the method of manufacturing sugar in the East-Indies, extracted from the report of the committee of the British privy council on the subject of the slave trade, but we shall insert only such parts of it as will throw light upon the method of manufacturing the maple sugar which has been mentioned, and to show how much it is to be preferred in point of economy to that which is used in the West-Indies.

“ Having been for two years in the English and French West-India islands, and since conducted sugar estates in the East-Indies; before the abolition of the slave trade was agitated in parliament, it may be desirable to know that sugar of a superior quality and inferior price to that in our islands, is produced in the East-Indies; that the culture of the cane, the manufacture of sugar and arrack, is with these material advantages carried on by free people. China, Bengal, the coast of Malabar, all produce quantities of sugar and spirits; but as the most considerable growth of the cane is carried on near Batavia, I shall explain the improved manner in which sugar estates are there conducted. The proprietor of the estate is generally a wealthy Dutchman, who has erected on it substantial mills, bailing and curing houses. He rents this estate to a Chinese, who resides on it as a superintendant; and this renter, supposing the estate to consist of three hundred or more acres, re-lets it to freemen in parcels of fifty or sixty on these conditions:

“ That they shall plant it in canes, and receive so much per pecul of one hundred and thirty-three pounds and a half for every pecul of sugar that the canes shall produce.

“ When crop time comes on, the superintendant collects a sufficient number of persons from the adjacent towns or villages, and takes off his crop as follows :

“ To any set of tradesmen who bring their carts and buffaloes, he agrees to give such a price per pecul to cut all his crops of canes, carry them to the mill and grind them.

“ A second to boil them per pecul.

“ A third to clay them and basket them for market per pecul.

“ So that by this method of conducting a sugar estate, the renter knows to a certainty what the produce of it will cost him per pecul. He has not any permanent or unnecessary expense ; for when the crop is taken off, the taskmen return to their several pursuits in the towns and villages they came from, and there only remain the cane planters who are preparing the next year's crop. This, like all other complex arts, by being divided into several branches, renders the labour cheaper and the work more perfectly done. Only clayed sugars are made at Batavia ; these are in quality equal to the best sort from the West-Indies, and are sold so low from the sugar estates as eighteen shillings sterling per pecul of one hundred and thirty-three pounds and a half. This is not the selling price to the trader at Batavia, as the government there is arbitrary, and sugar subject to duties imposed at will. The shabander exacts a dollar per pecul on all sugar exported. The price of common labour is from nine-pence to ten-pence per day. By the method of carrying on the sugar estates, the taskmen gain considerably more than this, not only from working extraordinary hours, but from being considered artists in their several branches. They do not make spirits on the sugar estates ; the molasses are sent for sale to Batavia, where one distillery may purchase the produce of an hundred estates. Here is a vast saving and reduction of the price of spirits ; not as in the West-Indies, a distillery for each estate ; many center in one, and arrack is sold at Batavia from twenty-one to twenty-five rix dollars per leaguer of one hundred and sixty gallons ; say eight-pence per gallon.

“ The improvement in making the cane into sugar in Batavia keeps pace with that in its culture. Evaporation being in proportion to the surface, their boilers are set with as much of it as possible ; the cane juice, with temper sufficient to throw up its impurities, is boiled down to the consistence of a syrup ; it

is then thrown up into vats calculated to hold one boiling, then sprinkled with two buckets of water to subside its foul parts; after standing six hours, it is let off by three pegs of different heights into a single copper with one fire; it is there tempered again, boiled up, and reduced to sugar, by a gentle fire. It granulates, and the sugar-boiler dipping a wand into the copper, strikes it on the side, then drops the sugar remaining on it into a cup of water, scrapes it up with his thumb nail, and is by this means able to judge to the utmost nicety of the sugar having its proper degree of boiling: the vats or receivers mentioned are placed at the left hand of a set of coppers; after running off for boiling all that is clear, the remainder is passed through a strainer on the outside of the boiling house; what is fine is put into the copper for sugar; the lees are reserved for distilling."



We shall close this part of our work with a few observations on those inquiries in natural philosophy which appear at present most beneficial to the United States of North-America, and best calculated for the promotion of human happiness.

INQUIRIES RELATIVE TO RURAL ECONOMY.

On the tillage of the United States the following remarks appear very interesting:—The succession of severe frosts and deep thaws during winter in all the northern and middle States make a variety of drains necessary in most soils and situations; yet an almost general neglect of this destroys a great part of the seed; a judicious treatise on the forms and courses of such drains would be very useful. A large portion of the arable lands in Pennsylvania, and some other States, being hilly, is detrimentally washed by heavy rains in every season of the year; especially the manure is thereby totally lost. This would be much prevented by transverse ploughing in a proper degree of horizontal inclination, which may be traced by computing the force and quantity of the water.

The Indian corn* is an essential article among American grains, and peculiarly suitable to an extensive country. It might be raised at so moderate a price as to bear exportation to Europe, in the northern parts of which it would be very valuable, as nourishment for domestic animals during the long winters. The

* Maize or zeo.

mode of planting this grain by four or five seeds together on hills, at the distance of several feet, appears less reasonable, from the consideration, that one part of the ground is left vacant, while the other is overcharged; that the contiguous stalks must impede each other; that their spindling height, and close position, subjects them more to the high winds, which not unfrequently sweep down whole fields. We are informed by the natives of Italy, that in that country the corn is planted so as to cover the ground equally, with convenient intervals for weeding.

The culture of meadows has gained a considerable perfection in the middle States, but is still capable of much improvement. A mode of banking effectually against the floods that often ruin the best marsh-meadows, has not yet been discovered: in open situations, a close row of some aquatic trees, beyond the bank, is indispensable for breaking the force of a stormy tide. The Americans want grasses that will flourish in dry and sandy soils: such, for example, as were lately introduced in Spain, and are said to have proved so beneficial to that dry and warm country.

The heat of the summers is unfavourable to grass, where the ground, though fertile, has not a degree of moisture; it is therefore advisable to try, whether barley, rye, or wheat, if cut young, would make good hay; and whether a second crop, or the succeeding pasture, may help to make a full compensation for an eventual harvest? We have heard this method much recommended by some cultivators in Europe. The division of pasture grounds by enclosures is generally neglected. Clean feeding is an advantage of admitting cattle, horses, and sheep in rotation, that deserves attention.

The value of land, and close neighbourhood, makes good fences necessary in old settlements. Worm-fencing, and similar expedients of infant cultivation, should never be seen; they occasion losses, vexation and contention. The regular frames of rails and boards would be much improved by hardening against heat and moisture: to render the lower part of the post more durable, burning, encrusting with mortar, and soaking in salt water, are expedients partly used, and worthy of trial. Live hedges are in general preferable to any, but yet very rare, though the country presents many shrubs of promising qualities.

The vast domains of the United States can vie with any country in the variety, utility, and beauty of trees and shrubs. Their stately forests are a national treasure, deserving the solicitous care

of the patriotic philosopher and politician: hitherto they have been too much abandoned to the axes of rude and thoughtless wood-choppers. What person of sense and feeling can, without indignation, behold millions of young oaks and hiccories destroyed, to make bonfires in open smoky houses, or trucked in the cities for foreign toys? Some parts of Europe were thus laid waste in former centuries, and the present generation must with great labour and expense repair the ravages of their forefathers. In many parts of America a preservation and increase of the timber for fuel, and other domestic uses, renders these queries important. What trees are of the quickest growth? At what age they do increase most? What is the proper distance between them? What is the best mode of pruning, for promoting the growth, and taking off all superfluous branches? What kinds are suitable to different soils? What species thrive best together? A judicious lopping of the branches, thinning close the clumps of trees, and clearing the ground of underwood, will make many woodlands good pastures, and form them into beautiful parks. This management would also improve the quality of timber by procuring the benefit of sun and air: the want of this may be regarded as one principal cause of the sponginess of their timber, which defect, so inimical to durability, strength, and preservation of a given form, is farther increased by a too common ignorance or neglect of the proper season for selling the materials of building, furniture, staves, and various utensils. Some valuable trees and shrubs are yet obscurely known; among these, the so called coffee tree,* in the western country, that bears a hard nut, the kernel of which is generally used by the inhabitants as a substitute for coffee; the native plum trees on the Mississippi, said to be far superior to those in the middle States; the newly discovered and much extolled grape of Scioto.† Many of those which have long been familiar to the Americans, still possess useful qualities little explored. Oil might be extracted from acorns, and especially from the large and greatly species of the chestnut oak; as lately, though but in few places, is done from the various kinds of walnuts. Spirits may be distilled from the berries of the red cedar, which so much resembles those of the European juniper. Wine, far better than what is generally done, can be made from the late grapes. From all kinds of grapes, the Persimon fruit, the berries of the sour gum,‡ and white thorn,§ the crab apple, the wild pears, plums

* Guilandia † A branch of the Ohio. ‡ Nyssa. § Crus gally.

and cherries, with similar fruits; spirituous liquor, and vinegar, may be obtained. The white thorn will, if it can be kept close and low, make an impenetrable and beautiful hedge; by its long, sharp, and solid spears, and by its clustering blossoms and large red berries. The new experiment of grafting foreign kinds on their native grape vines, said to be very promising, may prove a good preservative against the rigour of winter. In all probability many species of leaves would make good fodder for cattle, if gathered in the proper season, and well cured: this expedient is practised in the north of Europe,* is of great importance to one half of the American States, which have, according to situation, no pasture for five or seven months. Finally, we may sincerely wish that the owners of venerable woodlands might regard them as principal ornaments to their country; and while they clear a part for the purposes of agriculture, leave those hills crowned with towering pines and stately oaks; suffering likewise the groves of tulip trees and magnolias to wave among yellow harvests and blooming meadows. In some of the old countries, many gentlemen would purchase such rural charms at any expense, but must wait till the evening of life for the shade of their plantations; is it not then deplorable, that so many American farmers daily destroy what their offspring of better taste will deeply regret! This evil might in a great measure be lessened by a treatise on ornamental planting, adapted to the present circumstances of that country.

Half a century ago, philosophers thought it beneath them to investigate the economy of domestic animals. By this ridiculous pride, European countries have suffered much. The Swedish naturalists were roused near thirty years ago, to a serious attention, by a pestilence among horses and horned cattle, which destroyed many thousands in some provinces. In America, this important science has been much neglected. Not to enlarge upon a subject, which especially concerns agricultural societies, we shall only mention two or three particulars. America is not unfavourable to horses; yet those of good quality are not very common in many of the States, because the natural history of these noble animals is but little cultivated. They are often disabled by want of proper care, and perish by various disorders, especially by swelling in the throat, cholic, and the bots.†

* Aspin leaves, for example, are a pleasing and salutary food for horses.

† A kind of worms that devours their maw.

Sheep thrive well in some parts, but in others they die by dozens, without the owners knowing or inquiring into the cause.

Horned cattle suffer much when exposed to the winter's cold, which destroys their hoofs even under the thirty-ninth degree. But they and horses are affected by excess of heat in summer; which not seldom causes a fever, discernable by their want of appetite, dullness, and a yellow tinge of the mouth and eyes. The best European treatise on domestic animals will more or less apply to divers parts of the States.

Goats would be very valuable in the rocky woodlands of America, as they are in those of Europe. They are very hardy; their maintenance is cheap, as they browse summer and winter on most kinds of trees and shrubs; they yield a great quantity of rich milk; and their skins are very useful. The Angora goat, whose glossy hair is a material of the mohair, may also thrive as well in America as in Sweden, where it was introduced by the patriotic Astronomer.

Good orchards eminently unite the useful and pleasing, gratifying, through the greater part of the year, the taste, the scent and sight. Horticulture was an early object in America, and has made considerable progress. At present their first care should be, to prevent distempers of the fruit trees, of late become very alarming. Peach trees, have till within twenty or thirty years been very flourishing: some English writers relate with amazement, that the Americans fatten their hogs on this fruit, which is so costly in the north of Europe; and it is true, that many common farms abounded so far in a promiscuous collection of better and worse. But at present the peach trees are few, and generally in a sickly condition, through the greater part of the country. Of this one principal cause is a fly, that deposits her eggs within the stem near the ground, which produce a great number of worms, who quickly consume all the lower bark. Most kinds of plum trees are liable to decay, and the fruit is destroyed by a species of fly; but the ravages of this insect have been for a long time. Pear trees have never, indeed, flourished well, but of late far less: some ascribe the blights of them to lightning, and hang pieces of iron in the branches, to answer the purpose of electric rods. In some places lately, cherry and apple trees have been attacked by various distempers, which cause the fruit to rot, and the limbs to decay in rapid succession till the tree dies. This gangrene in fruit trees bears a strong

resemblance to the mortification of members in the human body; the corruption spreads quickly over a large limb, and amputation is the only preservative of the tree yet known. The loss of peach orchards is a considerable disadvantage, as their early bloom is the principal beauty of spring; and the fruit is not only very pleasing, both green and preserved, but also yields by distilling an agreeable and wholesome liquor, well known by the name of peach brandy. The apple orchards claim a solicitous care, merely as great ornaments of the country; much more so as they supply a great article of diet and salutary beverage, equal to several species of wine. An American treatise on fruit trees is wanted, which would show how far the best English authors are applicable to divers parts of the United States; give a full account of all the best fruits there cultivated, with their variation from local causes; collect all the various names of the same fruit, and fix one as national, to prevent a confusion that often frustrates information, both foreign and domestic.

Fish ponds are useful decorations in places distant from lakes and rivers; and it is matter of wonder why this advantage is not derived from ponds and streams which are so common: a useless and unwholesome swamp may thus be changed into an elegant improvement.

PHYSICO-MATHEMATICAL INQUIRIES.

Machines for abridging human labour are especially desired in America, as there can be no competition between them and the arms of industrious labour, while these have full employ on her extensive lands, which must be the case for ages. Agriculture has the first claim to the exertions of mechanical genius, as the principal source of national prosperity. Extent of territory, improved by artificial industry, must yield a great quantity of products at so cheap a rate as to bear exportation to very distant markets. It is moreover a weighty consideration to the humane philosopher, that agricultural mechanism would in the southern States supply the labour of slaves. Among important desiderata we may place these:—A machine for sowing broad-cast, so as to spread the grain even and in proper quantity; another for cutting drains, and making banks on their extensive marsh meadows; an apparatus for clearing new lands, which ought to be a compound of coulters, saws, axes, and screws, so that the trees may be pulled out of the ground, cut in convenient pieces, and heaped; a better instrument for reaping than the common sickle,

such, for example, as the cradling scythe of northern Europe; temporary sheds of easy and light construction for the preservation of the reaped grain in wet seasons.

The many shipwrecks that happen on the extensive, and often stormy coast of America, render diving bells very necessary; these machines are yet but little known.

A plenty of naval stores, and numerous ports, render ship building an important branch of national industry. This noble art, which has long been cultivated with success, would still be much improved by more expeditious modes of hauling timber, and of preparing the main pieces for the finishing workmanship.

An extensive inland navigation by locks and canals, is now become a great object of legislative care in several States; it is to be hoped, that such persons may be entrusted with these important works, as have a perfect theory of hydraulics, and a practical knowledge of local circumstances, among which the force of ice in winter, and of rainy torrents in summer, are to be duly estimated.

As many new towns and villages will gradually rise with the increasing population of the country, their situation and form should be chosen with a view of permanent circumstances. A sure supply of water is one great object. If the advantage of ports is desired, inquiry should be made whether the present water-courses are likely to continue; as in the old countries, several towns have been immersed, and others left far within land, by the increase or diminution of the water, or by the change of the channels. Health and conveniency require several open squares, wide streets, and a direction of them calculated for shelter in the winter, and for shade and ventilation in the fervent summer months.

Architecture claims the following remarks:---The position of houses ought to secure the fanning summer breeze, and exclude the wintry blast. Another object should be to exclude from summer rooms, the burning sun, during the hotter part of the day. Entries throughout the house are very common, but not generally in directions that best answer these purposes. The length, and by frequent intervals, severity of winter in the northern and middle States, makes warm rooms not only agreeable, but in a degree necessary. For this purpose, the most improved chimneys and iron stoves are inadequate expedients; especially as the open kind of these, though the more pleasant, yet consume a great quantity of wood. The stoves which have long been in use through Sweden, and a part of the neighbour-

ing countries, are unquestionably the best ever yet devised; they warm the room uniformly with a quarter of the wood required for these last mentioned, are free from any disagreeable steams, and have the appearance of elegant furniture.* Larger farms require several buildings, especially in cold countries, where store-houses and warm dwellings for domestic animals are necessary. If all these structures are formed on regular plans calculated for the value of estates, and respective local circumstances, the useful and agreeable may be united in a very high degree: a well-written treatise on this subject would be very valuable.

To form with speed and conveniency an accurate map of the United States, astronomical observations ought to determine the latitude and longitude of those places which are most essential to the figure of the whole country, or to the situation of certain parts in a political and economical view.

INQUIRIES IN NATURAL HISTORY.

Natural history, like a faithful guide, leads us through the mysterious mazes of nature, and opens to our enraptured eyes her sublime and beautiful wonders. How many precious plants are as despicable weeds trod under foot in every part of the world! how many new qualities are from time to time discovered in productions which have been known for centuries in countries long ago perustrated with this sacred lamp! what treasures may we not then expect in this new and vast division of the globe! in the forests of a thousand miles hitherto traversed only by savage tribes and mercenary traders; in the lakes, some of which are inland seas, and rivers that wander through several States before they meet the ocean! neglect of natural history under circumstances so alluring would indicate a want of rational taste. The great Linnæus wished that he could have explored the continent of North-America; may this wish animate American philosophers!

The vegetable realm claims their first attention. They should begin with a research of the stores it offers for the preservation and recovery of health. The frequent appearance of trees, shrubs and plants, whose taste and scent or analogy with well-known pharmaceutics is very promising, would lead us to ex-

* They are constructed by an iron grate-work, and panes of a fine clay fitted therein, which are varnished according to taste and ability. At Bethlehem, in Pennsylvania, an inferior kind of these are already in use.

pest a very considerable flock of native materia medica. But, although above an hundred of these species are, or have been, more or less in use among the inhabitants, very few of them are well known as to the extent and peculiarity of their qualities, and a very small number is adopted either by the apothecaries or regular physicians. On this view the following expedients merit attention---to substitute indigenous medicines of equal value for those imported, which by quantity or price cause a great national expense, and that are liable to adulteration or depreciation by age; to point out the best native plants in local districts, with fixed names, clear descriptions, and accurate medical instructions, for safe, convenient and general use; to appreciate the merit of those drugs which are esteemed specifics in the worst epidemic or particular distempers. Collecting all the botano-medical information at present attainable, we may judge what plants are most interesting, in what degree they are known, and how this knowledge may probably be most improved: the Indians have several remedies against the diseases and accidents arising from the climate and their savage mode of life; as fevers, rheumatism, wounds, bruises, scalding, chilblains, bite of venomous serpents; besides emetics, cathartics, sudorifics, and dietics. These have the sanction of time and simplicity. It is also generally believed, that they possess very important secrets, of which only a few extraordinary specimens are related with plausible authenticity. In domestic practice, particularly of the country people, we observe medical plants of general salubrity, used as detergents, tonics, sudorifics and laxatives; and others of particular virtue in rheumatism, fevers, pectoral ailments, visceral obstructions, ulcers, external hurts, poisons, female complaints, and diseases of children. Among the great number of these popular drugs, particular attention is due to those that are recommended by their salutary effects, attested by the patients or other persons of credit; and more so, when the testimonial is attended with the precise statement of facts. In case of defective information, we may expect valuable qualities in those which are in vogue over large districts; because this general esteem cannot be owing to imitation in a country, where intercourse between distant places has till of late been very limited, and where botanical curiosity is yet very rare. The medical plants which America has in common with other countries, possess the same virtue, under variations from climate and local circumstances; the too common opinion of their inferiority will often be changed by a fair trial. Different

species also promise a reward of examination from the generic similarity; when these are actually in use among the people of the country; the probability of their value is the greater.

An application of these principles will bring the following plants to particular notice : agrimony, potentilla-quinquefolium, polygonum-bistorta, gentiana, fumaria, angelica, cochlearia, erysimum officinale, arum, symphitum, inula campana, asarum, all grow in the northern and middle States, and are the same with or near a-kin to those classed among the best simples by Dr. Cullen in his *Materia Medica*.* The gentiana growing in the glades of Pennsylvania, is by Dr. Schoeph esteemed the best of their several species. The arum of North-America is generally called Indian turnip, from its ancient value among the Indians, and often used with other ingredients by the country people in that general debility consequent on tedious fevers. The best recommended remedies against intermittent fevers are cornus *florida*, dogwood; quercus *phellos*, live oak; persimon; lonicera *symphoricarpos*; by their barks; pyrola *maculata*, with the Indian name *piphsseva*; sambucus *Canadensis*; laurus *æstivalis*, spice-wood, Benjamin tree, benzoin. The first is more generally known; a decoction of the bark has, in many cases, been effectual; it is by some deemed equal, when fresh, to the Peruvian.† The second is much valued in the south, its native place; that of persimon in North-Carolina, and of lonicera *symphoricarpos* in Virginia.‡ An infusion of the plant pyrola *maculata* has been frequently used for some years in Pennsylvania, under the name of *piphsseva*.§ The sambucus *Canadensis*, red berry elder, is by the Indians called the *fever-bush*; a decoction of its wood and buds being of ancient renown among them.|| The laurus *æstivalis*, spice-wood, Benjamin tree, is also distinguished with that name by the people in the

* Compare this book with Dr. Schoeph's and John Bartram's notes to Short's *Medicina Britannica*, reprinted in Philadelphia, 1751.

† Kalm says, that in West-Jersey many were cured by the bark of the root who had in vain tried the Peruvian: in that sickly country Dr. N. Collin, of Pennsylvania, made use of it, and thinks it worthy of a full trial.

‡ Called St. Peter's wort, Indian currants; a species of honeysuckle. See Arbust. Amer. of Marshal.

§ See ditto; a species of winter-green.

|| Geschichte der Mission der Evangelischea Bruder unter den Indianern in Nord America, by Loskiel, published 1787.

thern parts, for the salutary decoction of its wood and leaves.* The bark of the liriodendron, *tulip tree*, is also very generally esteemed a good substitute for the Peruvian, especially that of the root. We may observe on these and other febrifuges, that the variety probably corresponds with the diversity of the fevers, which is very considerable, from latitude, season, and personal constitution: thus, for example, the above spice-wood is of peculiar benefit in that moderate but tedious kind, called *slow fever*, which is almost continual.

Against rheumatism these are worthy of trial: the root, in decoction, of *aralia spinosa*, angelica tree; the cones of *pinus strobus*, white pine; the twigs and roots of *magnolia glauca*, swamp sassafras, both in decoction and bath; the fresh bark of *juglans alba*, hickory, applied externally, is much used by the Indians.†

Dysentery has been cured by the bark and gummi of *liquidambar styraciflua*, sweet gum; *cynoglossum Virginianum*, foliis amplexicaulibus ovatis, hound's tongue; *triosteum angustifolium*, floribus oppositis pedunculatis; the root of white oak in powder.

Antidropical, well recommended, are the leaves of *callicarpa Americana*;‡ the root, in decoction, of *aralia nudicaulis*, foliis binis ternatis; that of sassafras in extract.

Cholic is removed by the oil of the above spice-wood berries; the flatulent and hysteric kinds, eminently so by *angelica lucida*; foliolis æqualibus ovatis inciso-ferratis, called therefore *belly-ach root*.

The best among pleuritic remedies must be the *pleurisy root*, so much extolled in Pennsylvania, described by Schoeph *asclepias tuberosa*, foliis alternis lanceolatis, caule divaricato piloso; another *asclepias* bears high value in Maryland, called also *butterfly root*; the *asclepias decumbens*, *pleurisy root*, mentioned by Mr. Jefferson in his *notes on Virginia*, must be one of these. The bark and berries of the above *magnolia*, either in decoction, or infusion of spirituous liquors, is generally salutary in those great colds which affect the sides, back and breast with painful *fitches*, attended with febrile chills and general languor.

* Memoirs of the American Academy, &c. printed in Boston, 1785.

† They drive the pain from one place to another until it breaks out in a blister: this bark burns the skin, as it were. Loskiel. In New-England a species of *pyrola* called rheumatism weed, and one of *aletris* named unicorn, are reputed very efficacious; the latter in the chronic rheumatism. Mem. A. Ac.

‡ A shrub growing in the southern States. Arbust. Am.

Anthelmintics are the chenopodium,* and the spigelia *Marylandica*, caule tetragono, foliis omnibus oppositis, Carolina pink, a southern plant, it will destroy the worms, but caution in the dose is requisite.

Spiræa trifoliata, foliis ternatis serratis subæqualibus, floribus subpaniculatis, ipecacuanha, Indian physic, baumont root, is an effectual and safe emetic. *Podophyllum peltatum*, foliis peltatis palmatis, May apple, is lately coming into practice as a laxative by an extract of the root that removes its emetic quality.† *Convolvulus panduratus* grows in the middle latitudes; and in the south some species similar to the convolvulus jalappa, not well explored.

Ulcers and cancerous sores are frequent among those whose humours are vitiated by perennial fevers; in a variety of remedies these deserve notice: *iris versicolor*, ashes of magn. glauca, in form of plaster, and a strong bath of saffra root, have cured ulcerated legs. The root of *saururus cernuus*, foliis cordatis petiolatis, amentis solitariis recurvis, *lizard-tail*, bruised and applied as a poultice to sore and impostumate breasts will ripen and heal them. A species of *nigella*, called *gold thread*, Indian *mouth root*, is an excellent remedy for an ulcerous mouth.‡ In New-England a species of gum, *water-avens*, *throat root*, cure all, is an esteemed remedy for ulcerated sore throat; a decoction of the root is both a gargle and drink.§ *Rumex acetosella*, floribus dioicis, foliis lanceolato-hastatis, *four dock*, *cancer root*, is recommended against inveterate ring-worms; this is biennis and found over the whole country: the juice is mixed with vinegar; (Schoeph) another is mentioned in the Boston Memoirs, the root of which in decoction is used in sore throat. The *phytolacca decandra*, floribus decandris decagynis, *poke*, has of late given promising experiments in the cure of cancers; the juice of the berries is inspissated by the sun; the young sprouts in spring are eaten as asparagus, but grown too far they are violently cathartic; this bush is common throughout the States.

* Jerusalem oak.

† The first grows in the northern and middle States, the latter in these and the southern; it bears on a stalk of two feet a yellow fruit like a lime, of a sweetish taste.

‡ Loskiel. Mem. of the American Academy; the root is like a ball of shining thread.

§ Floribus nutantibus, fructu oblongo, aristis plumosis; powder of the root is used by the Canadians in fever and ague. Am. Ac.

Preservatives against venomous snakes seem to be scattered over the whole country, and they merit full investigation, in order to provide prompt remedies, in every place, and against different kinds of serpents, especially in the new settlements. *Convolvulus purpureus*, *purple bind-weed*, is very powerful, if it is true that the Indians can handle rattle-snakes after anointing the hands with its juice, as Catesby relates; this grows in the south. A species of *jussia* is mentioned in the cited memoirs, as growing in the northern countries near the haunts of rattle-snakes, called rattle-snake plantain. The *hieracium venosum*, *foliis cuneiformibus hirtis, scapo nudo crassissimo erecto*, grows from the north to Virginia inclusively; is called poor Robin's plantain, and said to frustrate the bite both of the rattle-snake and of his supposed precursor the pilot-snake. *Erigeron*, likewise called Robert's plantain in Pennsylvania, is described by Dr. Schoeph thus, "*radix repens; folia radicalia ovata, basi attenuata, dentata dentibus paucis a medio ad apicem glanduliferis, obtusa, pilosa, venis paucis. Scapus biuncialis, pedalis, striatus, villosus, uniflorus, &c. &c.*" Dr. Otto, a respectable practitioner, informed him, that the herb ought to be given in a plentiful decoction, and also applied with the root to the wound. The herb of *solidago virga aurea*, golden rod, is used in the same manner.* The root of *aletris farinosa* is taken in powder, or bruised and steeped in liquor; this root is called star-root, blazing star, devil's bit, and greatly esteemed both by the Indians and the people of several States for many qualities.† The *polygala Senega* is well known. The plantain of Negro Cæsar we just mention, with a wish that an authentic account could be obtained of the experiments for which he obtained a public reward. Many credible testimonies agree in the fact, that the Indians have extraordinary skill in curing the bites of serpents; but whether any specific antidote is known appears doubtful: the plants in use act, however, as powerful sudorifics and absorbents; a narrative on this subject would here be too prolix for our plan.

* Schoeph describes it as *hirsuta, radice amara*: Bartram as "having slender purple stalks, rising a foot high, with a spike of fine yellow flowers, for near one-third part of the length of the plant," says it is much extolled.

† Bartram speaks of it principally as a "remedy in grievous pains of the bowels;" and says, it has a stalk eighteen inches long, with a fine spike of white flowers six inches in length, blooming in June, and growing plentifully in the back parts of the country.

Of late years madness of dogs has been more frequent; the *fwertia difformis*, recommended by Clayton, should be tried.*

In the search of new medicines, spicy trees and balmy evergreens are particularly inviting. The swamps of the low country abound in plants of aromatic scent; the *magnolia glauca*, so frequent in them seems to hold out her fragrant lilies and crimson berries to the skeleton-crew of Stygian vapours; probably her lovely sisters are also compassionate.†

Indigenous esculents claim attention in several views. Those roots, herbs, grains and barks, that in case of need can support life, may be useful to travellers in the wilderness, and to troops that carry on an Indian war; the savages make this use of the inner bark of the elm, and the roots of *aralia nudicaulis*. The fallads of many kinds, gathered in divers parts of the country during spring, should be generally known. Several wild fruits might be improved by culture, as walnuts, crab-apples, papaws, *annona*, plums, grapes, persimons, honey-locust, *gleditsia triacanthos*; some persons have planted orchards of this and made plenty of metheglin from the sweet pods. While the sugar maple is of late justly valued, its kindred also merit more attention: we are credibly informed, that in Canada equally good sugar is made from the weaker juice of the red maple, a tree that abounds through all the States. The chesnut oak is said by Schoeph to yield in spring a copious agreeable drink; other trees may have similar saps. Aromatic plants deserve notice: the barks of young *sassafras* and of *calycanthus floridus*‡ much resemble cinnamon: the *acorus calamus* is under name of spice-wort, used in Massachusetts. The plants used as tea in divers parts deserve examination: the *cassine*, called South sea tea tree, is obscurely known, but has long been famous among the Indians.§

Many vegetable dyes are already in use, both among the Indians and the inhabitants; some of them are also recorded by writers, but a collection of scattered practice, and a selection of the best in every kind, are yet wanted. In this branch, the practice of other countries may also be adopted: thus the *rhus*

* See Gron. Virginia.

† Serpent. Virg. *Sarsaparilla*, &c. wants no mention; several cannot here find room.

‡ Called Carolina allspice.

§ They call it yaupan, and drink an infusion of the leaves in copious draughts, both as a dietetic and inebriating. It grows near the sea in the southern States, ten or twelve feet high.

toxicodendron vernix, varnish tree, poison ash, is probably the same with the valuable species of Japan.*

Saps, roots, leaves, flowers, barks, may be useful in a variety of modes; for example—The roots of *æsculus pavia*, *scarlet horse chesnut*, and of *jucca filamentosa*, *silk grass*, are used for soap; † chesnuts can be prepared for the same use. The two kinds of *myrica*, candle berry myrtle, are known; the *melia azedarach* grows in the south, under the name of *bead tree*, but its berries are not yet in use for tallow, as in Japan.‡ The *asclepias*, called *silk-weed*, has a fine white down in its pods, which in Massachusetts is carded and spun into very good wick-yarn. While oaks abound, an extract of their barks might, as an article in tanning, be a valuable export.

Vegetable medicines for cattle are very interesting; a critical comparison of European treatises, with what is written and practised in America, will point out the best.

The beauties of the American flora are yet displayed only to those admirers, who have sought them, in fields and woods, from spring to autumn, in northern and southern climes, in the grand magniflora and the humble lily of the valley. Many of the wild flowers would adorn gardens, and embellish groves and meadows: but a great part of these are known only in their native places, and some have not even obtained a vernacular name. Flowery shrubs are gradually coming into more notice; and some of the finest will endure the winter of Pennsylvania; the *chionanthus*, *snow drop*, *fringe tree*, *calycanthus floridus*, *bignonia radicans*, *trumpet flower*, and the beautiful *Franklinia*, all grow well near Philadelphia.§ Several of the trees most agreeable by foliage, bloom, or lofty growth, have a spontaneous wide range, and others will, under a skilful hand, pass their natural limits.||

* By the travels of Prof. Thunberg, we find great analogy between Japan and North-America: thus the persimon grows there: the cones of the alder are in common use for black dye.

† They grow in the southern States.

‡ An oil is pressed which becomes equally solid with tallow. *Thunberg*.

§ The last is in Mr. Bartram's garden from fifteen to twenty feet high, and has not been affected with five severe winters within twelve years, though its native place is Georgia. The flowers are large and fragrant, with lily-like petals, and a tuft of gold-coloured stamens.

|| *Bignonia catalpa* flourishes in and beyond Pennsylvania.

Our remarks on the animal domains shall begin with the small tribes, because some of these do remarkable mischief. The Hessian fly has for several years made great havoc in the wheat fields through all the middle States,* and the canker worms, caterpillars, and other vermin, lay waste the orchards; some remedies will hopefully result from the inquiries, of late, begun in several places. Hosts of locusts some years infest the woods, and cause considerable damage by devouring the leaves of trees over large districts, many of which decay when thus exposed to the burning sun; they lie in the ground for a period of years, not yet ascertained; appear in the latter part of the spring, when the oaks are in perfect foliage, and in a few weeks disappear.†

Venomous insects are rare, and obscurely known, as they seem confined to the woods. A species of these, called mountain spider, that haunts the inner parts of the southern States, is said to be large, strong enough to take small birds in the net, and by his sting to produce violent pains at the heart, inflammations with alternate cold sweats, tremors, frenzy, and death, if proper cure is not obtained. In the middle States there is a black spider, whose bite causes great pains and a transient blindness, but is not mortal. A large ant, with a long sting, common in Maryland and farther south, is also very noxious.

Among the handsome insects in America, the fire fly is the first; thousands of these illuminate the summer nights, and by their gambols in the air, present a sky full of falling stars;‡ but the Americans know not where these lamps are hid in the long winter nights.

A striking mechanism is remarkable in the horn beetles of various kinds, and especially in the wood sawer, who with two curve inwardly dentated prongs, can cut off small twigs of trees. We venture to add a zoophyton in the Ohio country,

* Nestling in the joints of the stalks they bite it off before the grain is ripe.

† They seem to extend far, as many hundred acres upon the Ohio are said to be spoiled by them; yet is their depredation local and varying, so that different parts have their turn; they were in Pennsylvania eighty years ago, and with the same qualities, as we find by old Swedish records, which also add that the Indians fed upon them.

‡ Thunberg describes those of Japan in the same manner, under the name of *lampyris japonica*.

which alternately is vegetable and animal.* But without such extraordinary phenomenon, the economy of the numerous little animals is wonderful enough to awaken our attention, especially in this country, where it is yet unexplored.

Thirty or forty species of snakes are counted, but several are very imperfectly known, especially those which are rare or local. The horn snake is now seldom seen, but many accounts agree, that the spur of his tail is so venomous, as to kill young trees, if by accident it strikes them. The king snake of the south is not seen, we believe, far north. The double-headed snake may be a monstrous production; but two specimens of it are found in New-England, and two more are now in Mr. Peale's museum: that some kinds of serpents charm birds and squirrels is a fact, but in what manner we know not. Fortunately the smaller number is venomous, but which species should be avoided, is an interesting question; though the green snake, imperceptible in the grass, is harmless, some that occasionally come near houses, are not so.

On quadrupeds in general, two inquiries are interesting; what is the specific difference from those of the same genus in the eastern world? And how doth the same species vary in America under different latitudes? In the first the tygers and panthers require particular notice; in the second the bear, which frequents the interior country from north to south; and the panther, which has also a wide range. Among those peculiar to North-America, the moose deer is yet, we believe, undescribed, and known to few persons below the south of Canada.† The opossum, common in America, and long known for singularities, is yet unexplored in the greatest of all, to wit, that the female breeds her young at her teats within the false belly: many persons in distant quarters assert they have seen them adhering to the teats when small as a pea. The vast mammoth is perhaps yet stalking through the western wilder-

* This was communicated to Dr. Nicholas Collin, rector of the Swedish church in Pennsylvania, by a respectable missionary, who had long been among the Indians, and had seen this animal, but would not have his name mentioned, as the matter may appear incredible; it is three or four inches high, and after having crawled about the woods, is fixed in the ground, becoming a plant with a stem through its mouth, &c. It is analogous to the vegetable fly of Dominica, the berries swell in the ground, dies, and springs up like a young coffee plant, for which it is often mistaken, until the root upon examination is found to be the head feet and body of the animal. See the *Natural History of Dominica*, by Th. de Coudres, published 1791.

† Some years ago one was exhibited in Philadelphia; it is a large animal with very high fore legs, a short neck, &c.

nels; but if he is no more, his remains should be carefully gathered, and attempts made to find a whole skeleton of this giant, to whom the elephant is but a calf.

The great herds of buffaloes in the western country are a valuable national possession, a wanton destruction of them should be checked, and trial of domestication would, perhaps, be both practicable and useful.

The great number of birds in the old settlements have been described, but many equivocally, and our knowledge of their habits is in general very small. The Americans should not indifferently destroy those deemed of no value; who knows what part is assigned to them in the economy of nature? Perhaps the numerous tribes of woodpeckers save many trees from destructive worms. As to the useful and ornamental birds, they demand protection against licentious and greedy tyranny; the beautiful and melodious birds diminish fast, and the turkeys, once so abundant, have long ago been drove into the remote woods.

General knowledge of the fishes of America is very limited and confused: of those in the western waters we have only reports; there never has been from eye witnesses a tolerable account of the cat-fish, that weighs from seventy to one hundred pounds. Those proper in fish ponds cannot be selected without knowing what kind of water, food, &c. they require.

Natural history demands esteem from American seminaries of learning; and honorary degrees in this pursuit would be much better bestowed than on ministers of the gospel, the only good of which is, to increase the privilege of, and beget a blind veneration for a class of men who ought to be distinguished from society by nothing but their superior piety and virtue: the principal seminaries should immediately form botanical gardens, on a plan so liberal as gradually to receive all the trees, shrubs, and plants most valuable in every respect. Museums are also very important, for exhibition of both native and foreign productions.* Finally, it is necessary to fix general names for every vegetable and animal of public utility, that great numbers may receive and impart information.

METEOROLOGICAL INQUIRIES.

Changes in the atmosphere have such important consequences on the affairs of human life, that the art of prognosticating them

* That of Mr. Peale in Philadelphia, commenced a few years ago, is by his laudable care coming into reputation both at home and abroad, and merits the public patronage.

is very beneficial. It has of late years been cultivated with great assiduity in various parts of Europe, and the series of observations will gradually form a system that may at least unite probable conjectures with much certain knowledge. Several circumstances of the United States point out corresponding inquiries—they are subject to sudden gusts of wind, and some tornados that rapidly pass over a space of one or two hundred miles: from the beginning of spring till the setting in of winter, these occasion many unhappy accidents on their extensive coasts and ample navigable rivers. Their transient strokes are, however, not comparable to those severe storms that generally visit the Americans two or three times in that season: after these, the gazettes announce numerous deplorable shipwrecks, and other disasters; coming from the east with heavy rains, they generally cause inundations, which overflow a vast extent of meadow grounds, on the lengthy rivers and winding creeks, and sometimes damage wharfs and stores of commercial towns. A foresight of all these would enable them to elude their fury: vessels might stay in port, or seek a shelter; merchandise might be secured; the hay might be removed, and the cattle, which sometimes perishes by the sudden rise of the water. In summer the sudden gusts happen generally towards evening, after a sultry calm for some hours: when attended with thunder and rain, warning is given by the rising clouds: those with a clear sky are less frequent, and preceded only by light eddies in the air for some minutes. The tornados are probably announced by some remarkable symptoms, though their happily rare occurrences has prevented attention; the air is, we believe, very sultry for two or three days, and on the last, somewhat hazy with tremulous light breezes from the west. The easterly storms are ushered in by the gradual thickening of the clouds and increase of the wind for many hours.

The irregularity of the seasons is a great impediment in the business of social life; the fallacious appearance of an early spring often invites the husbandman and gardener to planting and sowing, which will be injured by severe frosts and cold rains. The beginning of winter varies also by several weeks: after the first of December, mild weather is often changed into cold, that within two or three days fills the rivers of the northern and middle States with ice, by which vessels outward bound are detained, and those coming on the coast suffer severely. A greater disadvantage of this variation is, uncertainty of the seeding time, on which much depends the future crop; if it is too early, the luxuriance of autumnal vegetation exhausts the root; if too late,

it cannot acquire sufficient firmness to bear the frost. The Americans have two prognostics of winter which are founded in nature: the migration of wild geese shows that the northern waters are freezing, and that they may expect severe north-westerly winds: abundance of rain, by cooling the air and wetting the earth, prepares both for the impression of the frosts; increasing number of partridges, pheasants, and other ground birds in the populous parts, with the appearance of bears, doth also indicate that the western woods are already covered with snow. Mild winters are always succeeded by cold springs. Early thunder is a sure token of immediate cold weather for a week or two. The progress of the vernal season would most probably appear from an accurate *Calendarium Floræ*; the bloom and foliation of some trees being unfolded, not by an occasional warmth of the air, but by a gradual penetration of the heat to their deep roots, proves at least an ascendancy of the vernal temperature not easily overcome by the northerly gales.

The sudden alterations of cold and heat throughout the year, would often be less injurious to health, by foreseeing them: general rules are these, excessive warmth for the season seldom continues above a few days, and quickly changes into the opposite extreme: fine days in winter, spring, and latter part of autumn, are immediately succeeded by cold and wet, rain or snow, according to season and latitude; wherefore they are called weather breeders.

END OF THE THIRD VOLUME.



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